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## UNIVERSITY OF CALIFORNIA AT LOS ANGELES



# COMPARATIVE SYNTAX 

## OF

GREEK AND LATIN

## Cambriogr :

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# COMPARATIVE SYNTAX 

OF

## GREEK AND LATIN

$B{ }^{+}$

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## in Two Parts.

## PART I. containing:-

ORIGINAL AND EARLY MEANINGS, AND PRINCIPLES OF SYNTAX AND APPENDICES.

Clambríone:
MACMILLAN AND BOWES.

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## PREFACE.

THE following work must necessarily be very incomplete : my knowledge of Sanskrit is small, and I have probably omitted many valuable details from Greek and Latin and English: and I have hardly been able to introduce any illustration from any other languages: and it is certain that very many will think that I should have done better had I devoted myself to thoroughly sifting and working out some small detail: (in fact, such was the advice which Prof. Brugmann himself most kindly offered me). And indeed, had I been certain that in the forthcoming volume ${ }^{1}$ of Brugmann's magnificent work, infinitely more attention would be paid to forms (which are the only reliable starting-point in Comparative Syutax ${ }^{2}$ ),
${ }^{1}$ Comparative Syntax by Delbrizek.
${ }^{2}$ I mean this, that if we start to explain and reconstruct the history of e.g. the Latin 'Ablative' of the consonant-declension, the Latin 'Infinitive' in -ré, and the Latin 'Imperfect Subjunctive', on the assumption that they are respectively Ablative, Dative, and Imperfect, and nothing else, and if we admit, as we must, that forms were regularly used because they conveyed their own meanings, then, when 'Phonctic Law' tells us that these forms are (certainly or probably) not what we have assumel them to be, our construction (however satisfactory it may seem) falls to the ground. 'Phonetic Law' tells us that nomine and mente are probally (at least partly) Locative, not only Ablative, in form, and that the form in re is possibly both Locative and Instrumental, or one only, or sometimes one and sometimes the other, ete., anyhow not Dative, and that esses is probably a sigmatic Aorist, not Imperfeet, in form, and that therefore nomine and mente are probably Locative etc. in meaning, and the form in -re Locative or Instrumental or both ete. in meaning, and esses Aorist in meaning; and common sense tells us that to deny that they probably have these meanings, and to insist on explaining them as certainly
and to Principles of development in language, and to the exact extent to which our present evidence justifies dogmatisms, than seems to have been paid in the Syntactische Forschungen (if one may judge from the ideas which have come into English Grammars through it), I might have left this book mwritten, and have been content to wait patiently mutil the appearance of the new work, and until it had become known to English readers. As it is, this final result seems still far distant, and, if my work, very shadowy, very incomplete, and very inaccurate as it is, beyond all doubt, yet does something towards illustrating the inmmerable difficulties and uncertainties, and the many tangled or broken threads, of Comparative Syntax, and does something (however insignificant) towards making Syutax somewhat less uninteresting, and somewhat more a field of enquiry for the majority than it is at present, I shall be satisfied.

If many of the results are, or seem to be, obviously wrong, I must ask the reader to carefully bear in mind that this is not a leamed work (as Delbriuck's work will be), and that, as I have clearly stated throughout the book, on almost every page, the suggestions are only meant to be suggestions of some possibilities, and not of certainties: and I think it will be found that in this respect my work makes an almost entirely new departure. It would be very nice if almost the whole history of Greek and Latin Syntax before the times of which we have evidence were capable of being mapped out neatly, definitely, and with certainty, as it has been usually mapped out hitherto, chiefly on such suppositions as that because some constructions occurred in the Vedic hymns (2000? в.c.) therefore the Latins developed these same constructions and no other constructions by their side. It would be very nice and funny to know that ever since the earliest times the Greeks and Italians, before veuturing to form a new construction by analogical extension, ran or swam in the direction of India to ask if this analogical extension existed in

Ablative, Dative, and Imperfect in origin, is only consistent if e.g. we call עuktós, Kúpou dंmoөavbvtos and $\pi 0 \hat{v}$; Locatives in origin, and the Historic Infinitive a lresent or Past Indicative Tense in origin.
early Sanskrit, and, if it did not, forbade any one in Greece or Italy to use it on pain of death : in fact the theory that we can map out certain portions of the history with certainty presupposes very many very ludicrous incidents.

I would say one word to any one who may think this book worth criticising. When e.g. Dr Verrall writes a work which gives a new theory as to the plot of the Ion, it behoves the bona fide critic, in any Review which to some extent represents national scholarship, to criticise this new theory, and to say to what extent and why he considers that its views are right or wrong : obvionsly the Review shoukd accept notes on smaller points (such as the meaning of $\sigma \tau \epsilon ́ \phi \eta$ ) either separately as isoluted notes, or before or after or in course of the criticism of the main ruison d'étre of the book: but no bona fide criticism should be accepted quê criticism without treating fairly of this main contention.

I have noticed that in more than one Review the tendency has been, of late, not to criticise the broad and distinguishing facts, and the main features, but to give a bite here and there like a gnat or a flea: and I have noticed that often a book, rotten as a whole, and rotten in most details, rotten, in fact, from skin to core, is treated as severely or leniently and so gets the same 'character' as a book which is on the whole admirable, but which errs (as nearly all books must err) in some details. It is not that actually false statements are made-a false impression is however iufused into the reader's mind, none the less-but all sense of proportion is hereby lost: e.g. a right principle is many times more important than a wrong detail, inasmuch as this principle comprises, ipso facto, a quantity of right details. To dote upon i thousand items (sometimes to the exclusion of an exceedingly practical and uudeniable principle of common sense), characterises very much of German work, much of American work, and not a little of Euglish work. Attention to minutice deserves greater praise thau it obtains anong men: but it is apt to overlook the fact that, if we once really grasp the principles of one instance, we often thereby grasp the priuciples of the other 999 . The 1000 instances are also somewhat tedious to one who leads
a busy life in other spheres, and who yet would know something about the Principles that underlie those details.

Might I ask my critics to remember that my book has at least one main contention, viz. that our evidence does not often justify that dogmatism with which pre-historic forms or constructions have hitherto been mapped out as certainties, and that many views hitherto stated and accepted as certainties still remain to be proved to be certainties?

The new matter in this book is, roughly speaking, as follows:
I. It is maintained that, in giving the pre-historic development of most constructions, certainty is impossible and possibility or probability is the most we can attain to: and that the neatest and most definite results are usually also the most inexact.
II. Some Principles of development in Syntax (e.g. Analogy, Implication, etc.) are first given, together with some instances from Greek and Latin which may purticully illustrate them, and then it is suggested how constructions may possibly have been developed from possible original meanings in accordance with them ${ }^{1}$.
III. Some of the disadvantages of grammatical cutegories, and of a certain class of litercl translutions, are estimated.
IV. It is maintained that, because a construction occurs in some one language of the Indo-European group, it does not follow from this that it certainly occurred or was certainly the
${ }^{1}$ If such Principles of development in Language, etc. were insisted on (e.g. Principle I: that a word or a construction need not necessarily have the same meaning which it originally had) very much adverse criticism of a writer's style or phraseology might be awoided. To take one instance, a recent tirade on the English of the Revised Version might have been left unwritten: for, apart from the occasional bad taste and want of moderation in the language, many of the arguments fail to hold good for the simple reason that the Revisers are not attempting to reproduce original English idioms, but are, to a great extent, writing in the best English of to-day, in which many constructions hace become irreproachable, which in early English either did not exist, or would not have been correct English if they had been used. To criticise, as this critic does, is like censuring a business-man for no longer wearing the swaddling-clothes which once were appropriate.
only construction used in some other language of the same group, but it generally follows that it may possibly or probably have been one of the constructions once used in that language.
V. A few philological suggestions are given, as well as a brief consideration of how far some of the dogmatic results of the New School are certainties (v. Appendices I. ad fin. and V. ad fin. for the final conclusion).
VI. The uncertainty as to how far different meanings were original, or later developments, and as to how far they were originally denoted ly distinct forms, and how far by forms differentiated to express distinctions of meaning, is strongly emphasized: (v. Appendices III. and IV.)
VII. Some details are:
(a) The Infinitive in Greek and Latin.
(b) The Middle Voice and Changes of Voice and Time (v. Principle XI.).
(c) The three origins of Prepositions.
(d) The possible original unity of the Accusative, and the possible original unity of the Cienitive.
(e) The possible importance of the Locative.
$(f)$ The Future Indicative was often the same thing as the Aorist Subjunctive.
(g) The Latin Aorist-Perfect.
(h) The treatment of Mixed parts of speech.
(i) The original meanings of Imperfect, Middle, Relatives, Subjunctive and Optative, Indicative, and the Neuter, etc.

The following are the chicf authorities:
For Morphology, etc.: the grammars of Brugmann, Victor Henry, King and Cookson, Iwan Miiller; suggestions in the Classical Review: e.g. the Early Italic Declension (Lindsay), the Gerund and Gerundive (Conway) ; the -1 of the Latin Passive (Conway), Conway on Verner's Law in Italy (for the Latin Aorist and Perfect forms).

For Sunskivit Instunces: Dr Peile's Nala, and some lectures on Nala by Mr R. A. Neil, of Pembroke Coll. A few Vedic hymms (Delbriick), and some lectures on them by Prof. Cowell. The Sanskrit Grammars of Whitney, Monier Williams, and

Max Miiller. 'To all these authorities I owe a very great debt, practically all the small knowledge of Sanskrit which I pussess.

For Greek: Instunces: 'Thompson's Greek Syntax. Monro's Homeric Grammar. Hadley's Greek Grammar. Middleton's Essay on Analogy. Goodwin's Moods and Tenses (especially), ete.

For Latin Instances: The Latin Grammars of Roby, Allen and Greenough, Madvig, Postgate, ete.

For some of the Principles: (mostly, in their applicution to Phonetics and Morphology). Wheeler's Analogy and King and Cookson's Grammar (for Analogy and Contamination). Paul's Principles of the History of Language (very valuable, though the Principles are only scantily applied to syntax). Curtius' Greek Grammar Explained. Hale's Cum-Constructions (the last two books apply some Principles to the history of Syntax).

For Detuils of Greek and Latin Syntax:
Roby's Latin Grammar (especially for some ideas on the Gerund and Gerundive and the Dative of the Agent).

Hale on Cum-Constructions (for the general method and for the uses of the Latin 'Subjunctive' with cum, in so far as they go back to a 'potential' origin).

Hale on Sequence of Tenses, in American Journal of Philo$\operatorname{logy}$ (for the theory that the tenses of the Latin 'Subjunctive ' in Dependent sentences had once the same meaning which they had in Principal sentences).

Isaac 'Taylor's Origin and Home of the Aryans (for the main features of the map in Appendix I.).

Goodwin's Moods and Tenses: (for ideas on the original meaning of the Snbjunctive, Aorist, and Imperfect, and partly for the original meaning of $\pi p i v$, and of $\mu \grave{\eta}$ with ov and $\delta \in ́ \delta o \iota \kappa a$, and for the classification of conditional sentences).

King and Cookson's Grammar: (the division of Dependent sentences into Final and Conditional, and the Development of Parataxis into Hypotaxis, and the history of the Relative ete.).

Monro's Homeric Grammar: (the meaning of ${ }^{i} \nu$ and $\kappa \in \nu$ and some uses of $\pi \rho i v$, and many instances, and the 'Article').

Classical Review:
Carter on the Aorist Participle (most of the points suggested
in this paper I had already written, long before it appeared, in the second part of an article on the Aorist, in which I tried to account for every use of the Greek Aorist as going back, ultimately, to a single meaning. The first part of this article was not accepted by the Classical Review, but most of it will be found under 'the Aorist and Imperfect' etc.).

Bishop: verbals in - тos in Aeschylus.
Weymouth: the Greek Perfect.
Wheeler and Conway: Grammatical and Natural Gender (very useful).

Conway: the Latin Gerund and Gerumdive (very good).
Postgate: the Latin Future Infinitive in -turum (partly).
A. Sidgwick: Personalisation in Greek (very suggestive).

The American Journal of Philology: The Schema Pindaricum: Hanssen on the Latin Adjective: Gildersleeve on the stylistic effect of the Participle in Greek: etc.

This book is chiefly intended for candidates for the Classical Tripos at Cambridge and for Moclerations at Oxford, and for the Sixth Forms of Schools. For forms below the Sixth, it may be open to objection : for it tends to upset many established beliefs (e.g. that mensale and dominī are certainly Genitive, and that regeres is certainly Imperfect) and to introduce a new spirit of euquiry and 'scepticism', and it would often substitute what is accurate and vague for what is definite and wrong, and, above all, much of the work is too advanced for lower forms. Such objections seem generally to stand apart from the consideration of how far the new ideas may be probable and interesting to the boy, and how far they train the boy to be accurate and to think for himself, rather than (to take the other extreme) to perform the function of an industrious parrot, or of a very improved phonograph.

Part I. contains some original and early meanings, some Principles and five Appendices ; Part II., which will be published shortly, will contain The Syntax of the Noun (inchuding the C'ases (ienders and Numbers, Prepositions, and the Adjective), the Verb (including the Voices and Tenses and the Subjunctive, Optative, Indicative, Imperative, Infinitive, Gerund and Gerundive and Participles) and the Sentence: Part II. will also con-
tain discussions on the Relative Pronouns, the 'Article,' Conditional Sentences, Silver Age Latin, New Testament Greek, and Compound words. Part II. will also contain the Indices for both Parts. I am afraid that, in spite of the Table of Contents and the brief Index, Part I. can hardly be conveniently used as a book of Reference until a fuller Index has been made: and as the rest of the work would make the book nearly treble its present size I have thought it better to put it in a second instalment with the full Indices.

I owe my best thanks to the staff of the University Press for the great care and patience which they have shown in the printing of this work, and to Mr Bowes for his suggestions as to the headings ete., and the title of the book.

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## CORRIGENDA.

## v. also Additional Notes.

P. 16, 4 lines from the bottom, after the words 'I have a striking'' add "(this might have been the original meaning of the Active also, in which case the development of the Active would be as follows, and differences between Active and Middle would be the result of differentiation.)"

On p. 18 (The Indicative), 12 lines from the top, after the words "A. the Indicative," instead of the words "which stated...was a fact" read "which connected a person or thing with the idea of action or put such a connection in the form of a question."

On p. 19 (four lines from the bottom) for " (2) " read " (4)."
Pp. lxxxv-c (Appendix III.) "Mr F. W. Thomas comnects the a of e.g. feram, eram, ferebam, é $\phi \epsilon \rho \dot{\rho} \mu \bar{\alpha} \nu$ with Sanskrit i and the I. E. Indeterminate vowel ( $\bar{z}$ ). This is a very valuable suggestion : it would not alter the main contention of Appendix III, however."

On p. xciv, Footnote 2; "Mr H. D. Darbishire has kindly pointed out to me that uoi $\rightarrow$ uei $\rightarrow$ uī, and so (uìdi), uinnum, uīcus go back to oi only. This does not become a certainty till someone proves that Latin could never have used an ei form in the I'erfect and in o-stems: can we state this dogmatically, with onr present data?"

## INTRODUC'TION.

## Methods of Philology.

Philology, in its provinces of Phoneties, Etymology, and Morphology, has of late years approached nearer and nearer to an Exact Science. Oddities like 'snch and such a derivation would do well enough because the meaning is appropriate' are no longer tolerated as they used to be. The results of Philology may, roughly speaking, be summed up as follows:
"Changes of sound in a language extend to all people who have intercourse with one another in that language, and to cll words in which the somud, which is affected, occurs under the same conditions" (v. Appendix V.).

Now strictly speaking no sound can be proved to oecur under exactly the same conditions in any two words: since no two words can be proved to be used with exactly the same frequency, and with exactly the same emphasis and position in the sentence, in exactly the same connexions and associations, by people of exactly the same class and neighbourhood. Even a single word does not always ocenr under exactly the same conditions (in the case of moenia and minia the different meanings of the word constitute the different conditions). With this very exact interpretation of the words 'under the same conditions,' the law camot assert doginatically e.g. that, in Latin, if an original oi becomes oe in one word, it always becomes oe in that same worl-much less that it ahways becomes oe in every word. The dilemma is obvious: if we say that the conditions must be exuctly the same we must formulate one or more phonetic laws for every word, and mnst formulate no
single phonetic law applicable to any two words: then and then only should all our phonetic laws be absolutely without exceptions-if they be correctly formulated. If, on the other hand, we say that the conditions need not be exactly the same, e.g. that what is law for a sound in a verb must be also law for the same sound in a noun or particle, and for a monosyllable or trisyllable, we must, ipso facto, give up that clanse of Phonetic Law which denies any exceptions.

And the New School have been very justly censmred for combining two ineompatibilities: (1) interpreting their definition 'under the same conditions' too widely, and as meaning 'under the same general conditions,' and formulating a 'phonetic law' on the strength of words which oecur under the same general conditions only, and (2) denying the existence of any exceptions to this 'law.' If this absolute invariability of phonetic law is to be insisted on, the only course seems to be to insist on the difference of condition being the canse of every apparent irregularity, and to illustrate what is meant by differences of conditions. And, since there must be many differences of condition, in the growth of words, which we camot possibly realise, a little less dogmatism in stating 'laws,' and a little less dogmatism in condemning suggestions which seem to slightly violate the 'laws' without any difference of condition apparent to us of the 19th century, might help to conciliate to the New School those of the Old School who at present resist modern improvements. A glance at some of the differences of condition in Phonetics must surely show that, in criticising a suggestion on the gromd of its violating a Phonetic Law, we may, quite easily, be putting under the law an instance which differences of condition put ontside the sphere of the law ( v . further Appendix V.).

The following differences of conditions are suggested as specimens: most of them appear in different grammars, and the technical names are used here for the sake of brevity.

1. The influence of Analogy-(many prefer to call certain analogies by the name 'Contaminations'). These subdivisions are not necessarily mutnally exchusive ( v . Wheeler's admirable pamphlet on Analogy).
A. Where the forms are not connected, but
(1) The meanings are cognate (e.g. words for ‘sitting ').
(2) The meanings are contrasted (e.g. words for 'united ' and 'separated').
(3) The meanings belong to the same category of words (e.g. numerals and names of seasons).
(4) The functions are alike (e.g. second persons singular).
(5) Association arises from mere sound or rhythm etc. almost entirely apart from function and meaning (e.g. v. Bloomfield on the History of the Recessive Accent in Greek).
B. Where the forms are comected, and
(1) The meanings are cognate.
(2) The meanings are contrasted.
(3) The meanings belong to the same category of words, etc. etc.
2. The Preservation of Archaisms or the Revival of Archaisms (e.g. (?) naturai in Lucretius).
3. The Borrowing of Foreign words.
4. Differences of Dialect (e.g. Rufus is a dialectic form).
5. Differences between the speech of the higher and lower classes.
6. Differences of Accent and Stress, including word-accent and sentence-accent (cp. agitur and quíd agitur? $\rightarrow$ quid igitur ? whence igitur 'therefore').
7. The preservation of an older form beside a new form to convey a differentiated meaning (sense-donblets) e.g. moenia beside mūnia.
8. The position of the word in the sentence (sentencedonblets: cp. perhaps oút $\tau$ and oút $\tau \omega$ s).
9. The date of a Phonetic Law (e.g. $\mu$ ovoans did not become $\mu o v \sigma a \bar{s}$ till the law that $\bar{a}$ became $\eta$ in Ionic had ceased to operate).
10. An inaccurate representation in writing, on the preservation of some older graphic representation after the prommeiation has changed.
11. Metathesis, Prothesis, Epenthesis, Dissimilation, Apocope, which sometimes come very near to being 'sporadic.'
12. A form arbitrarily imposed by a certain person or clas.
13. Above all, some different phonetic condition, such as the nature of the preceding or following sound or sounds, and the position of the sound in a word, whether initial, medial, or final, etc.

Every week, almost every day, words which were regarded as exceptions to a 'Phonetic law' are being proved to be really due to some difference of conditions, i.e. to come under some other law : one may almost go so far as to say that it is being proved that these words would have been exceptions liad they been other than what they actually are.

## Methods of Syntur.

To bring every word muder a law and to justify its formation, i.e to prove it to be regular, is the grand aim of such Philology. How does the modern treatment of Comparative Syntax compare with the enlightened views on Morphology? It has to deal with a vast array of facts, which are, generally speaking, lucidly arranged (as e.g. in Madvig's Latin (rammar): how has it dealt with them? does it try to prove that constructions are regular, and that the formation of all, or of the great majority of them, is justifiable,--in a word that they would he almost exceptional if they were other than they actually are? Strangely enough, there has been scarcely any attempt to apply a number of principles like those of Morphology to the province of Syntax: yet it is quite clear that anyone who would treat of Comparative Syntax must first thoroughly grasp not merely the uses and instances which are found existing, but also the main principles which must direct his treatment of these uses. It will be seen from the following pages how frequently modern research and criticism tests or rejects a theory, or says one construction is used 'for another,' on some entirely inadequate ground : for instance, a theory is frequently considered utterly absurd, or a construction weird, if English
does not show an exactly parallel development：a hair－splitting ignorance ventures to oppose itself to an undonbted fact in language，and often to several fundamental principles of develop－ ment in language．One illustration will suffice：grammarians lay down as an equation that $\delta p a ̄ \sigma o \nu=$＇do thou，＇and then often take for granted a phenomenon well known to be exceptional， viz．that the development of the meaning of $\delta \rho \hat{a} \sigma o \nu$ in Greek was exactly parallel to that of＇do thou＇in English．Hence oi $\sigma \theta$＇ò $\delta \rho \hat{a} \sigma o \nu$ was often regarded as a strange construction used＇instead of＇something else which is more like English ： for，say they，＇thou knowest the thing which do thou＇is bad grammar in English，and therefore in Greek also ：but surely the

 struction like oủ סou入єutéov toùs vô̂̀ é $\chi$ оутаs тоîs как⿳⺈s

 suggest that oì $\sigma \theta^{\prime}$ ò $\delta p \bar{a} \sigma o \nu$ might have meant in carly times ＇thou knowest the thing which thou art to do＇（colloquially we say＇you know what you＇ve got to do＇）．Have we any right to demand a Greek construction other than that which we find actually used，in fact，to stigmatise as a mistake that which we find actually used，unless we have first proved that there was no possibility or probability of any principle of language de－ veloping this construction out of some other construction，i．e． unless we have first proved that this construction had absolutely no ruison d＇étre？Mr．W．（．Hale has said that＇the task of the syntacticist is to find for every construction either a direct descent from some construction that is acknowledged to exist， or a genesis in the working of some natural psychological influence upon such a construction＇：a better definition of the task of the syntacticist it would be hard to find and we owe Mr Hale a great debt for not only being almost the first to really insist on this duty，but also for trying to carry it out himself in his work on the cutn－constructions．

In tracing to original sources the constructions which we find existing，we must work very cautiously：we can，with

[^0]some approximation to certainty, apply the results of 'Phonetic Law' to the surviving forms in many constructions; often, however, the result of the application of 'Phonetic Law' will be infinitely more shadowy than would at first be supposed (v., for instance, the varions explanations of a form like pedĕ given in Appendix I. and of amès in Appendix IlI. and v. also Appendix V.), and important reservations will have to be made. Secondly, we can estimate, more or less, what the present meaning of the smrviving forms is. Thirdly, we know the main Principles of the development of Forms and of Syntax, thanks chiefly to Paul's 'Principles of the History of Language.' Fourthly, we have cognate langrages, in different stages of development, from which to make inferences as to original meanings and subsequent developments.

From these considerations it must be clear that, since from the beginnings of syntax thousands of years must have elapsed down to the earliest time of which we have evidence, there is very little ground for dogmatic statement as to what happened during those thousands of years. From a study of the Comparative Syntax set forth by Delbriick, Monro, Allen and Greenough, and others, it must be clear that hitherto there has been very little written on many departments of Comparative Syntax which does not consist in dogmatic statements as to what has happened during those thousands of years. It must therefore be clearly understood that, in the following pages, I mean to suggest original meanings and subsequent developments, not as in any way certain, but as those which seem to me to account best for the existing constructions on the recognised principles of development in language.

## CHAPTER 1.

## THE MAIN DIVISIONS OF SYN'TAK.

The most important subjects to consider, in Syntax, are the Nom, the Verb, and the Sentence.

Under the Nom, we may consider the Cases, Genders, and Numbers. This heading will also include the Adjectives and Adverbs and ' Prepositions.'

Under the Verb, we may consider the Voices, Moods, and Tenses (and the Participles and Gerund and Gerundive, etc.).

Under the Sentence, we may consider the development of the Subordinate sentence out of the Principal sentence.

In giving the chief characteristics of an anthor's syntax it will be found useful to remember these three divisions and their subdivisions. For instance in giving some of the characteristics of Homer's syntux:

1. Under the noun, we may say that he uses the cases very freely, and often expresses by a simple case what Attic Greek would express by a 'Preposition' governing a case ( $\pi \epsilon \delta i \omega(\pi \epsilon \in \epsilon$ ), and often the case or the case + the 'Preposition' has a Local or 'Temporal meaning, where in Attic the meaning is metaphorical ; that he often uses a plural verb with a Neuter Plural, where Attic Greek woukd use a singular verb; and that he uses the Dual more than Attic Greek uses it.
2. Under the verb, we may say that he uses the Middle of many verbs of which Attic Greek uses the Active ( $\delta \rho \hat{\omega} \mu a \iota$ ); that the 'Infinitive' is used more often with the meaning of the (!) Locative or Dative of an Alstract nom, and its original meaning can be more easily traced, than in Attic Greek; that the original meaning of the Snbjunctive and Optative can be
more easily traced, and that these moods have freer and more numerous uses, with and without äp and $\kappa \in ́ v$, than in Attic Greek, which often uses the Indicative where Homer uses the Optative : that Homer can use an Optative in almost every construction where he uses a Subjunctive, but not, vice versâ, a Subjunctive wherever he uses an Optative, and that, in Homer, one form of the Subjunctive (e.g. $-\sigma \omega,-\sigma \epsilon \iota \varsigma,-\sigma \epsilon \iota$ ) has not yet been set apart from other forms (c.g. $-\omega,-\eta s,-\eta$ ) to express, mainly, future time (v. Appendix III.), and that the Perfect often has, practically, the meaning of an Aorist Present, and that it often denotes a state.
3. Under the sentence, we may say that he sometimes uses Parataxis where Attic Greek would use Hypotaxis, that is to say, that the development of two sentences, origimally independent, into one independent sentence and another dependent on it, is in Homer often hardly begun, though often it is in full progress or completed (e.g. it is sometimes impossible to say where a construction like $\tau \grave{\eta} \nu \delta^{\prime}$ Є́ $\gamma \grave{\omega}$ où $\lambda \dot{v} \sigma \omega \pi \rho i ́ \nu \mu \iota \nu \kappa а \grave{\imath}$ $\gamma \hat{\eta} \rho a \varsigma{ }^{e} \neq \pi \epsilon \iota \sigma \iota \nu$ has two sentences 'I will not release her: old age shall come upon her first' or one sentence 'I will not release her till old age come upon her' or has a meaning between these two meanings), v. Principle XII. 3 (a).

These are a fow of the characteristics which this triple division of syntax suggests: it would of course be pointed out, also, how Homer shows the development of the demonstrative and personal pronoun into what is later called the Article, and how he shows the old construction, the intermediate development, and the new construction, side by side.

## CHAPTER II.

SOME POSSIBLE ORIGINAL AND EARLY MEANINGS.

## Noun :

Cases: There were and ure, roughly speaking, at least eight cases in Greek and Latin.

Possibly at one time pure stems ${ }^{1}$ without case-endings were used for at least four casc-meanings, Nominative, Vocative, Accusative and Locative: if this was so, then the exact meaning originally came from the context cte. e.g. a stem nomen or (?) övopa would have been used in constructious like the following :
'a name (is) given'
'I know a name'
'Balbus by name':
then certain endings (the origin of which is very obscure) came to be attached to this pure stem in order to make the meaning clearer: e.g.
s to denote that the thing was the subject: or sometimes the long vowel of the stem marked the stem as subject (e.g. $\lambda \epsilon ́ \omega \nu$ beside $\lambda \epsilon ́ \sigma \nu \tau-o s$ ):
$m$ to denote something like 'to the extent of the house': es, os, s to denote that the house defined a substantive notion :
${ }^{1}$ We have no right to pooh-pooh this theory; everyone says that we have no evidence for it, but we have the only evidenee which is essential, viz. the evidence of forms: we have mensa, $\chi \omega \rho \bar{\alpha}$, and nomen and nāma and övoua, and $\lambda$ úfiv and syóman, and yūpa(dīru), and $\mu \epsilon \gamma a \lambda o ́(\pi o \lambda t s)$, and angui(manus), which evidence shows to be pure stems, whereas there is no evidence of any kind to show that they ever had case-terminations of any kind.
ed, od, d to denote 'from the house' :
ai to denote 'to or for the house':
a to denote ' by, with, with respect to, the house':
i (or bhi), to denote 'in, at, on, about, etc. the house.'
But (1) Case-endings were not always added : e.g. there is no case-ending to denote the subject, or the compass or extent, in words like nomen, nomina (plural), ö oо $\mu a$, òvó $\mu a \tau a$-these are, apparently, pure stems, and are traces of the original use: vyónam, and similar formatious in Sanskrit, were (cp. $\lambda v \in \rho \in \nu \rightarrow$ $\lambda v \epsilon \epsilon \nu \rightarrow \lambda \dot{v} \epsilon(\nu)$ originally pure stems, but, in certain contexts, meant 'in the sky': i.e. 'bird tlies sky' $\rightarrow$ 'the bird flics in the sky' (cp. the English of niggers and of Red Indians).
(2) There were other case-endings besides those given abuve: e.g. dhe(n), Greek $\theta \epsilon(\nu)$, to denote 'from,' de, Greek $\delta \epsilon$, to denote 'to,' bhi, Greek $\phi \iota$, to denote 'at' etc.

Nominative: case of the subject, the person or thing spoken about:

Vocative: the person or thing addressed: originally an exclamation, like the Imperative (cp. 'Hi!' which can mean 'O Jones' or 'Stop'): so, properly speakiug, the Vocative was not a case :

Accusative: the compass or extent of a verbal notion: ' I strike to the extent of the boy' and 'I strike to the extent of a second' and 'he advances to the extent of one mile.' The direct object of a transitive notion becomes very soon distinguishable, viz. 'I strike the boy': at the other extreme comes the Accusative of 'Respect' (tremit artūs and $\dot{\alpha} \lambda \gamma \epsilon \hat{\imath} \tau \grave{\eta} \nu$ $\kappa є \phi a \lambda \dot{\eta} \nu)$ : between the direct object and this Accusative lie many uses. A division might be made into
A. 'direct object of a transitive notion ':
B. 'compass or exteut not the direct objcet':
$A+B$. 'instances sometimes nearer to $A$, sometimes to $B$, sometimes between A and B.'
(C. 'Double' Accusatives:
J). Accusatives with 'Prepositions.')

An instance of $\mathrm{A}+\mathrm{B}$ would be 'Caesar advanced a three days' journey,' which may be sometimes nearer to A 'Caesar
made a three days' journey,' sometimes to B 'Uatsar advanced to the cxtent of a three days' jouney,' and sometimes between $A$ and $B$.

These three cases have, to a certain extent, the same history in Greek and Latin :

Dutive: perhaps the person or thing to or towards whom or which an action etc. is directed-it corresponded roughly to the English prepositions 'to' and 'for':

Instrumentul or Instrumentul-Comitutive: the attendant circumstances of an action, including means and accompani-ment-it corresponded ronghly to the English 'by,' 'with.' and 'with respect to.' Possibly all these uses came from 'means.'

Locutive: apparently in carly times it expressed 'place where' and 'time when'; but its present uses can be best realised by a rough comparison with all the uses of the English prepositions ' in,' 'at,' 'on,' ' over,', ' ubout,' ' (emong,' and ' by':

Ablative: apparently that firom which separation takes place: the meaning 'according to' (cp. ex lege) scems to have been partly derived from a meaning of 'starting from something as a standard (e.g. of comparison)':

Gentive: defined a substuntive notion in any lind of way.
The English 'of' is much too narrow. Apparently the Genitive could define a substantive notion in all the ways in which other cases could define verbal notions, although the desire for clearness would often prevent its use.

As to the theory that all Genitives are either 'Objective' or 'Subjective,' i.e. represent either an Accusative (Object) or Nominative (Subject) it is ahmost incomprehensible : the objections are
(1) many instances of Genitives do not correspond to Accusatives or Nominatives: e.g. ‘a man with a long nose’;
(2) many instances are both Objective and Subjective: e.g. iniuriac civium may be paraphrased by 'the citizeus (Subject) suffer injuries' or 'they injure the citizens' (Object);
(3) the nearest paraphrase of $\dot{o} \phi \dot{\partial} \beta o s \tau \hat{\omega} \nu \pi o \lambda \epsilon \mu i \omega \nu$ is not 'the enemy (Subject) fear us' nor 'we fear the enemy' (Object), but perhaps 'the fear within the enemy' (Locative)
and 'the fear cansed by the enemy' (Ablative), or 'the fear about the enemy' (Locative).

The equivalence of the Genitive with substantives to the other cases with verbs etc. can best be realised by the following ' Predicative' uses.

Accusative and Genitive: ' What right have you to touch him?'
[quid tibi hunc (Plautus) or huius tactio est ?]
'He has a pain in the head'
[ $\dot{\imath} \lambda \gamma \epsilon \hat{\imath} \tau \grave{\eta} \nu \kappa є ф а \lambda \dot{\eta} \nu$ and capitis dolor].
Dative and Genitive: ' $\Lambda$ war was carried on for the sake of defending'
[cp. proticiscitur cognoscendac antiquitatis, and decemviri legibus scribundis].
Ablative and Genitive: 'He made a journey from Rome,' 'The journey was the result of ill-hcalth.'
Instrumental and Genitive: 'He struck a blow with his hand,' 'He was a man with a long nose.'

Locative and Genitive: 'There was a man at Athens,' 'It was at a late hour in the night,' 'He showed proficiency in riding'
[cp. $\nu \cup \kappa \tau o ̀ s$ and $\nu \cup \kappa \tau i$ ódòv є̀ $\pi \sigma$ oí $\sigma \epsilon \nu$ ].
Nominative and Genitive: 'The city of 'Troy.'
Theoretically, perhaps, the Genitive was originally used in dependence on the substantival idea e.g. of 'journey' in 'he made a journey,' and the Locative etc. in dependence on the verbal idea of 'he-made-a-journey' or 'he went' etc.

These five cases, Dative, Instrumental, Locative, Ablative, and Genitive, have not remained separate in Greek and Latin. In both Greek and Latin one or more of them have been fused together, so that there are certain cases (e.g. the Latin 'Ablative') which are not single cases, but are compounded of two or more cases (e.g. the Latin 'Ablative' of Ablative, Locative, and Instrumental).

But cases have cmalyamated differently
(a) in Cireek and in Latin:
(b) in some declensions and in others:
(c) in the singular and in the plural.

The nature of this amalgamation has, hitherto, been grossly misunderstood (v. Appendix I.): the facts seem to be as follows: suppose a form A denoted certain meanings ( $a, b$, $c, d, e, f)$ and a form B certain meanings $(d, e, f, g, h, i)$ : then suppose that A has used the neutral-ground meanings $d, e, f$ as a stepping-stone on to the meanings $g$ etc. [once denoted by B], and conversely that $B$ has used the neutral-gromed meanings $d, e, f$ as a stepping-stone on to the meanings $c$, etc. By this process, and by analogical extension, A and B may both come to express the same meanings $a, b, c, d, e, f, g, l, i$ : when this has been wholly or partly accomplished it is natural that language should either
I. preserve both A and B with all these meanings: or
II. set apart A to denote certain meanings, and B to denote certain other meanings: or
III. fuse the forms A and B into a single form, having all these meanings: or
IV. drop the form A (sometimes or always) or the form B (sometimes or always) : or
V. employ one process sometimes, and another process at other times ( v . Introduction to Latin 'Ablative').

Again, supposing that A denotes $u, b, c, d, e$ and B denotes $e, f, g, l, i$, and supposing that in some declension A and B come to have the same ultimate form $\mathrm{AB}-\mathrm{AB}$ will denote $a, b, c, d$, $e, f, g, h, i$ : if, then, in this declension it makes no difference whether the form A or the form B be used to denote all these meanings, then it may come to pass that, on the strength of this neutral ground, A may be extended to denote some of B's meanings and B some of A's meanings.

It is probable that the amalgamation of two or more cases into a whole was due to the eases having some meanings in common, and also sometimes to their having some forms in common.

The following outlines of possibilities will be more fully discussert at the end of Appendix I.

The Latin 'Genitive' singular is in form (and therefore in meaning) sometimes Genitive (e.g. mentis), sometimes Locative (e.g. animī, mensae).

The Latin 'Ablative' Singular is in form (and therefore in meaning.) sometimes Ablative (e.g. animō, mensā), sometimes Instrumental (e.g. animत̄, mensā, pede), sometimes Locative (e.g. pede).

The Latin 'Genitive' Plural may be Adjectival.
The Latin 'Dative' and 'Ablative' Plural may be sometimes Locative and (?) Dative (e.g. animis, mensīs), sometimes (?) Ablative (e.g. pedibus, or is it partly Instrumental ?).

The Greek' 'Genitive' Singular is sometimes Genitive (e.g. $\chi \omega ́ \rho \bar{\varsigma}, \pi а т \rho o ́ s)$, sometimes Genitive and Adjectival (e.g. 入ó $\gamma o v$ ), and sornetimes Ablative (e.g. $\chi \omega ́ \rho \bar{a} \varsigma, \pi а т \rho o ́ s)$.

The Greek 'Dative' Singular is sometimes Dative and (?) (?) Instrumental (e.g. $\chi \omega \dot{\rho} \rho \bar{a}$, $\lambda$ ó $\gamma \omega$ ), and sometimes Locative (e.g. $\chi \omega ́ \rho a, \lambda o ́ \gamma \omega(?), \pi a \tau \rho i ́)$.

The Greek 'Genitive' Plural may be Adjectival.
The Greek 'Dative' Plural is sometimes Dative (e.g.
 татра́ $\iota \iota$ ).

It may be taken as an approximately correct rule that whatever be the surviving form or forms of the Amalgamated Cases the meaning is the same: to this rule there are exceptions, but it may be illustrated by the fact that the Locative animi has the same meaning as the Genitive mentis, and the Ablative and Instrumental animo as the Locative and Instrumental mente.

## Genders:

The question of the genders is very perplexing; it is, briefly, this: was the distinction between masculine (e.g. eizoós, ager,
 originally one of sea or not? Another question is, How did the neuter arise?

The nenter plural ${ }^{1}$ seems very likely to have been, in origin, the same as some feminine singulars (e.g. repulsa), which,
from originally expressing an abstract collective noun, developed into
(a) feminine abstract singular (e.g. repulsa 'defeat in the abstract') and
(b) neuter concrete plural (e.g. repulsa 'conerete defeats'); perhaps, however, this theory only applies to a certain number of nenter plurals and feminine singulars in a.

The neuter singular (which has a peculiar form only in the Nominative Singular and in the Nominative and Accusative Plural) perhaps was originally a pure stem without Nominative or Accusative case-ending (e.g. nomen, nomina, övo $а$, ò оо́ $а \tau а$ ), or the Accusative sometimes extendel to be used with the meaning of a Nominative (e.g. bellum, tò áratóv), by what is called a proportional analogy of forms rather than of meanings ${ }^{1}$.

## Numbers:

There was a singular number, denoting one person or thing, or a collection of persons or things viewed as a mity (e.g. populus, $\tau \grave{o} \pi \lambda \hat{\eta} \theta_{o s}$ ), and to some extent, a plural number denoting more than one person or more than two persons.

The questions about the numbers are:
(1) was the 'Dual' (or the number denoting two persons or things) an Indo-European formation, or was it, like the Genitive in o(or e)sio (Greek ov, $\epsilon \nu$, Sanskrit and Zend asya), confined to several dialects of Indo-European?
(2) was the Plural originally distinct from the Singular? $s$ is the typical Plural letter (e.g. dominis, mensis, pedibus (?),
 anything plural about e.g. the $\iota$ of $\lambda$ óyo九, $\chi \hat{\omega} \rho a \iota$, domini etc., or the endings -1 m and $-\omega \nu$, or were these endiugs originally only incidental to words with plural meanings, the plural meaning coming, perhaps, from the context ?

1 i.e. nomen (pure stem) had the meanings of an Accusative and of a Nominative-in other words nomen (Accusative) had the same form as nomen (Nominative): hence the tendency was to give to the Nominative of certain words of another declension also the same form as the Accusative, i.e. to create beside the Accusative form (bellum) a new Nominative form (bellum).

## The Verb:

## Voices:

Apparently there were originally two Voices, Active and Middle.

It is quite obvious that the Passive is not a necessity of language. If 'the boy is hit by the ball' then 'the ball hits the boy' etc. The Passive came sometimes from the Active and sometimes from the Middle.

As to the Active it was either ( 1 ) Trunsitive 'I strike the boy,' or (b) Intransitive ' I strike': it is possible that neither use was derived from the other, but that the Transitive sense came from the Accusative case (q. v.) : the Intransitive can develope into
(c) the Passive: [if we postulate an original legesi, the second person singular Active, then both legere and $\lambda$ é $\gamma \epsilon \iota$ may be Active in form and sometimes Passive in meaning]-the development may have been something like this: 'I strike' or (?) 'I have or am comected with a striking' $\rightarrow$ 'I am struck': cp. English 'I hang the picture,' I ring the bell ' and 'the picture hangs,' 'the bell rings' etc.:
(d) the Reflerive [(?) lavare and $\lambda o v \in t]$-the development may have been parallel to that of 'I wash' meaning 'I wash mysolf,' and 'I shave' meaning ' I shave myself,' the intermediate stage of meaning being, perhaps, 'I have a wash,' 'I have a slave':
(e) the C'rusal [sisto and "' $\sigma \tau \eta \mu \mathrm{l}$ ]-the development may have been from 'I stand' or (?) 'I am comeeted with a standing' to 'I make (somenne or something) stand'; cp. English 'I print something ' $=$ 'I get something printerl.'

The Middle either originally had the same meaning as the Active, in which case its developments into ( (1) (b) (c) (d) and (e) need no explanation, or it originally meant something like e.g. 'I am commected with a striking' or 'I have a striking' $\rightarrow$
( 1 ) 'I strike'-either with an Accusative of the direct object or with e.g. a Genitive, originally defining the substan-

(b) 'I strike' (intransitive):
(c) 'I am struck' [legeso $\rightarrow \lambda$ é $\gamma o u$, legere (?)]-cp. aı̈ $\sigma$ $\theta \eta \sigma \iota \nu$ é $\chi \in \iota$ (in bald English) 'it has perceiving,' 'it is connected with perception' $\rightarrow$ 'it feels' (e.g. $\dot{o}$ voûs) or 'it is felt' (e.g. $\dot{\eta}$ $\lambda \dot{u} \pi \eta$ ), and ep. the history of Active and Passive words like amabilis, pransus, factus, volveudus, pitiful etc. (v. Principle XI.)
(d) 'I strike myself' [خоúєтaı and lavāso (?) $\rightarrow$ lavāre]: ep. 'I have a wash' meaning 'I wash myself,' 'I have a shave' meaning ' I shave myself.'
(e) 'I get someone struck' [ $\delta i \delta a \dot{\sigma} \kappa о \mu a \iota ~ \tau \grave{\nu} \nu \pi a \hat{i} \delta a]$ : the development from 'I have or get the striking,' ' I am comected with the striking' to 'I get (someone) struck' is not very difficult.

The accepted theory that the Middle originally meant
(1) 'I strike myself' and
(2) 'I strike (someone else) for my own interests,' fails to explain how $\theta a v o \hat{u} \mu a \iota ~ c o m e s ~ t o ~ m e a n ~ ' I ~ s h a l l ~ d i e ' ~ a n d ~$ סıסríкорає тò̀ maîסa 'I get my son taught,' and is open to many serious objections.

The Latin Passive may be illustrated by the following words:
legere: either Active (legesi $\rightarrow \lambda \epsilon ́ \gamma \epsilon \iota$ ) or Middle (legeso $\rightarrow \lambda$ érov):
legitur: possibly-if I may use forms which are not actually
 and id legunt 'they choose it,' side by side with which was another 3rd person plural id eligur 'they choose it' $\rightarrow$ 'one chooses it ' $\rightarrow$ 'it is chosen' (ep. on dit cela $=$ 'that is said'), and the two forms for 'it is chosen' viz. id legito and id eligur were contaminated into id eligitur or id legitur (v. Principle V. B. 8) :
legimint: possibly Dative of an abstract verbal noun used with the meanings of an Imperative (cp. $\lambda \hat{v} \sigma a \iota$, and Enghish expressions like 'to bed!' 'to work!' ' to the Mansion House !' 'to heel!' etc.); and extended to the Indieative by proportional analogy ; i.e.
M. T.

Imperative legite (cp. $\lambda \epsilon ́ \gamma \epsilon \tau \epsilon)=$ Indicative legite (cp. $\lambda$ é $\gamma \epsilon \tau \epsilon$ : legite later became legitis beside legis and legimus): hence beside the Imperative legimini was created an Indicative legimini. Or clse legiminī = $\lambda \epsilon \gamma^{\prime} \mu \epsilon \nu \circ \iota$, and the participle was used
 drsṭavantas = 'we have scen'): vos would have once been expressed.
legi: probably originally 'to or for a choosing' (Dative of an abstract verbal noun), developing into a Passive just as 'good for cating' (Dative) $=$ ' good to be eaten.'

Moods and Tenses: v. Appendices III, and IV.
Apparently there was, at one time,
A. the Indicutive, which usually stated something as a fact, or asked whether something was a fact, and
B. the Subjunctive and Optutive, which had the general meaning of futurity, into which the tone and context etc. infused the ideas of e.g.
(a) prophecy and promise (' you will do this anyhow,') or
(b) command, wish, or duty ('you will do this if you do what I wish you to,' ' you shall do this'): or
(c) concession (' you will do this, for all I care'): or
(d) possibility ${ }^{1}$ (' you will do this under certain circumstances' $\rightarrow$ ' your might possibly do this '):
(e) all the above uses put as questions.

Both Greek and Latin set apart certain forms of these moods mainly to denote prophecy and promise (1), and Latin created a new form in -bo for this meaning. Other forms of these moods were reserved, in the main, for the meanings (b) (c) and (d). But although Greek and Latin were alike in confining certain forms mainly to (a), (Greek used certain Subjunctive forms, and Latin, perhaps, certain forms both Subjunctive and Optative) yet they differed in one respect-the Latins elsewhere used the Subjunctive and Optative indifferently, and sometimes dropped one form or the other, partly becanse they had

1 This is a later development, probably: sometimes we have, between (a) and ( $d$ ), what is probable or expected.
the same meaning : i.e. the two Moods amalgamated in Latin; whereas the Creeks apparently sometimes created a distinctionGreeks were given to seeing or creating subtle distinctions ${ }^{1}$ between the Subjunctive and Optative. Where this distinction does exist, it is rather that between commund and wish, and also between present and future purposes, etc. and past proposes, etc.
c. The Imperative, which was originally mainly an exclamation ; cp. $\lambda$ é $\gamma \epsilon$, lege, 'say,' 'choose.'

Apparently there was originally one tense which derived its exact shade of meaning from the tone and context etc. This tense one may call the Aorist: in the unaugmented Indicative forms this Aorist had a vague and flexible meaning ahmost but not quite corresponding to e.g. ' your doing this is a fact,' in other' words connecting 'you' with the iden of 'doing this,' into which comnexion a definite meaning could be infused by particles or by the context and tone, viz. e.g. (roughly speaking)
(1) Present: 'Your doing this is a present fact.'
(2) Future: 'Your doing this is a future fact' (occasionally also 'do this').
(3) Pust: 'Your doing this is a past fact.'
(4) General : 'Your generally doing this is a fact.'

Of these four meanings
(2) was more clearly denoted by the Subjunctive and Optative Moods, and so was rarely expressed by the Indicative [e.g. quo fugimus? ' whither are we to fly?' $\pi o \hat{\imath} \phi \in u ́ \gamma o \mu \in \nu$; ]
(3) was more or less confined to the Greek forms with the Augment (the Augment being a sign-post of past time), and to the Latin forms with the Aorist s (e.g. dixī), or with reduplication (e.g. totondī), or with the Midlle ai $\rightarrow \overline{\mathrm{i}}$ (e.g. vīdī) with or without a vowel-variation of the stem, etc.

This left the Aorist Indicutive (commonly called the Present) to express, as a general rule, (1) Present time and (2) General

[^1]time, although traces of the old freedom of this Aorist do survive.

As to (2) in the sense of command etc. it was rare, because the meaning of command etc. was more clearly expressed either by the Subjunctive and Optative or by the Exclamatory Imperative, which was admirably adapted for commands.

As forms of the verb which were not originally 'finite' one may suggest $\lambda \hat{v} \sigma o v, \lambda \hat{v} \sigma a \iota$, legimīnī (v. Principle VII.), and the first person singular in $\bar{\sigma}$ or $\omega$ which was conceivably in origin a noun of agency.

The Infinitive was not origimally a Mool at all, but an abstract verbal norm: the Greek forms in -aı [e.g. Sov̂vat, ópâ$\theta a \iota$ ] and the Latin forms in -ì [e.g. capī, sequī] were apparently $D$ atives of abstract verbal nouns, originally meaning 'to or for a taking' etc. The Latin forms in -e [e.g. capere; cp. genere] were apparently 'Ablatives' [i.e. Locatives only, or Locatives and Instrumentals ${ }^{1}$, or Instrumentals only, etc.], originally meaning 'in, at, on etc. a taking', and 'by, with, with respect to a taking,' etc. The Greek forms in $-\nu$ [c.g. $\lambda \dot{v} \epsilon \iota \nu]$ were apparently pure stems, into which a simple meaning, such as a Locative meaning, was originally infused by the context. For a pure stem without casc-ending and with a Locative meaning cp. Sanskrit vyóman $=$ 'in the sky.' We may then, roughly speaking, call the Greek forms in -ac and the Latin forms in -i Datives, and other forms, in Greek and Latin, 'Locatives' (this is, of course, inaccurate), and for the origin of the distinction of voice which we sometimes find between the Dative (Passive, e.g. $\lambda a \mu \beta a ́ \nu \epsilon \sigma \theta a \iota$, capī) and the 'Locative' (Active, e.g. $\lambda a \mu-$ ßaiveıv, capere) we may compare the English Passive Dative 'good for euting' = 'good to be eaten,' and the English Active Locutive 'good at euting' = 'good at eating (things).'
${ }^{1}$ Nothing could be more typical of the New School than the 'Phonctic Law' that final $\bar{a} \rightarrow \check{c}($ ( $o n$ the strength of the equation (?) pede $=\pi \dot{\epsilon} \delta a$ ), without the proof that the Latin - $\check{e}$ of pede is always or ever derived from- a . It is possible that the $-\tilde{e}$ of pede sometimes goes back to $-\check{\mathrm{t}}$, but it is also possible that pedae in Latin entirely dropped out, beeause its meanings were already denoted by pedie. This 'Phonetic Law,' therefore, may have done a great deal of harm to Syntax, not so much lyy merely being wrong as by being stated by the New School as if it were incontrovertible.

The Purticiples were, apparently, in early times both Adjectival and Verbal in meaning: they qualified a person or a thing or an act, and were at the same time capable of certain distinctions, such as that between Active and Passive, and between contemporaneous past and future time-such distinctions were originally, to a very great extent, infused by the context into a vague and flexible meaning: e.g. into a vague idea corresponding to the bald English 'having a ...ing' the context infused a definite meaning-e.g. past active (prausus 'having dined'), past passive (actus 'having been done'), future passive ( ${ }^{\circ} \tau \lambda \eta \tau 0 s$ ' not to be endured') etc. etc. Later on certain forms became, by a process of differentiation, narrowed down to expressing certain definite meanings; traces of the old freedom of use are, however, freruently met with. The 'neuters' of Participles could, like the neuters of other Adjectives, be used with the meaning of abstract verbal nouns (cf. maturato opus est 'there is need of hastening').

The Gerundive was, apparently, in early times a Participle or a Verbal Adjective with a flexible meaning, into which the context alone could infuse a definite meaning, e.g. 'taking,' 'taken,' 'being taken,' 'to be taken' ete. The 'neuter' of this Gerundive could be used as an abstract verbal noun (the Gerund $)=$ ' a taking.' Later on the Gerund and Gerundive were narrowed down to certain stereotyped meanings and certain stereotyped constructions.

As to the Tenses, it is possible that the Aorist, when formed by the root in its weakest form or by the root $+s$, came to be mainly confined, in past time, to expressing an act as an act, and developments from that idea-it regarded an act or acts as a complete whole, from a bird's-eye point of view. The act or acts regarded as in progress may be merely the Aorist in a different shade of meaning, just as 'he was engaged in doing this last summer' is another way of regarding the fact 'he did this last summer.' And distinctions between this l'rogressive (sumetimes denoted in Greek by the root in its strong form or by the 'moditied' forms of the ront, e.g. the root + suffixes etc. and in Latin by a form in -ban in past time) und the Aorist may have sometimes given rise to still further distinctions,
such as that between an act as an act (Aorist) and an act as still going on, i.e. begun or attempted, but not completed (Progressive), v. Principle X. 6 and Appendix III.

It is possible that the 'Perfect' (often a reduplicated root, with or without 'vowel-variation' in the stem) originally expressed, like the Aorist, an act as an act, and in Greck came (chiefly by differentiation) to be used often of a permanent state etc., whereas in Latin it came to be often confined to past time, just as the Sigmatic Aorist did, and so these tenses, expressing a past act as an act, or the present state of affairs resultiug from a past act, amalgamated into one tense. However it is not inconceivable that the Perfect originally, or in early times, denoted a state, and hence sometimes the act resulting in that state. This would form a bond of connection between the Latin past Aorist ('he did it') and the present Perfect (almost 'he has done it ').

The following outlines will roughly illustrate the Greek and Latin uses:

In Contemporaneous (or 'Present') time neither Greek nor Latin distinguishes the Aorist ( $\pi o \iota \in \hat{\imath}$, facit, 'he does it') by a separate form from the Progressive ( $\pi o \iota \epsilon \hat{\imath}$, facit, 'he is doing' it'): the Perfect ( $\pi \epsilon \pi o$ in $\kappa \epsilon$, fecit, not quite 'he has done it') is to a great extent distinct from these two tenses, but in Latin it amalgamated with the past or sigmatic Aorist ('he did it').

In Future time Greek and Latin scarcely distinguish the Aoristic and the Progressive ('I shall do this' and 'I shall be doing this') by separate forms: the Perfect is sometimes distinguishable from the Aorist and Progressive in meaning.

In Pust time Greck and Latin did distinguish between the Aoristic and Progressive (Imperfect) and Perfect (Pluperfect) to a great extent. Latin created a form in -bam to denote, mainly, an act in progress; in Latin also the past Aorist ('I did it') amalgamated with the present Perfect (?' I have done it').

## The Sentence:

It is said that all sentences were originally independent of one another : but the existence of the Greek Relative with any other (original or') early meaning than that of a Rclative is not
borne out by Sanskrit and it is not absolutely proved by any Greek use. It seems certain, however, that the Moods and Tenses originally had the same meaning in Principal and in Subordinate sentences (or in sentences which became subordinate). Instances of the development of the Principal into the Subordinate Sentence (or of Parataxis into Hypotaxis) would be the Latin Relative, which was, apparently, like quis and Greek $\tau \iota \varsigma$ and $\pi o \iota$, originally indefinite or interrogative: e.g.
$\left.\begin{array}{l}\text { 'Is any merry? } \\ \text { Some one is merry : } \\ \text { Who is merry? }\end{array}\right\}$ let him sing psalms'
might $\rightarrow$ 'let the man who (defining relative) is merry sing psalms.'
 'I will not release her: old age shall come upon her first' might have been the original meaning: we should here have two sentences. These two sentences might have $\rightarrow$ one sentence with another subordinate to it, viz. ' I will not release her till old age come upon her' (v. Principle XII. 3 (a)).

## CHAPTER III.

## some principles of syntax.

Before begimning the outlines of Syntax it will be as well to illustrate some of the Principles on which constructions have developed from the above original and early meanings. A few words must be said by way of preface:
(a) The following explanations of constructions are only intended for some of the possibilities : a knowledge of other languages, besides Sanskrit, Greek, Latin, and English, would extend the possibilities, or make them approach nearer to probability or make them retreat further from the ground of probability:
(b) The English parallels are only suggested as rough parallels and are not necessarily intended for good English :
(c) A more elaborate discussion of some points is reserved for the Appendices:
(d) Some Principles (such as the nse of the Concrete form rather than the Abstract form) are not discussed here to any great extent, as they are so familiar.
I. The present meaning of a construction is often different from the original meaning [cf. the present meaning of words with their original meanings]:

This Principle is very important, and one illustration will serve as an introduction. If the Genitive originally defined a
 Genitives no longer defining substantive notions, but standing as attendant circumstances of a verbal notion, then the present
meaning of these Genitives is different from the original meaning. If this Principle be clearly comprehended an enormous number of the difficulties of syntax disappears at once.
 fear that he will (or may) come.' No one can fairly agree with Gilderslecve (American Journal of Phifology Ix. p. 161) that this is a trace of parataxis. The original meaning may have been 'I am afraid: let him not come,' implying 'I am afraid : there is a possibility of his coming' $\rightarrow$ 'I am afraid that there is a possibility of his coming' or 'I am afraid he will or may come' (one sentence with another subordinate to it) ; similarly ou $\mu \dot{\eta}$ é $\lambda \lambda \eta \eta$ : the main ${ }^{1}$ (perhaps not the only) origin of this construction, meaning 'he will certainly not come,' may have been that $\mu \dot{\eta}{ }^{\prime \prime} \in \lambda \theta \eta$ 'let lim not come' implied 'there is a possibility of his coming,' and later on came to express this meaning: ov denied the possibility of his coming: cp. Plato $\mu \dot{\eta}$
 boorish to speak out the truth ' (cp. Principle X. 7).
(2) The Case after a Compurative (cp. Principle III. 6): the Greek 'Genitive' and the Latin 'Ablative.' Some possible early constructions are
(a) the Ablative (cp. Sanskrit): the original meaning may have been either 'starting from $B, A$ is greater,' ' $\Lambda$ is greater taking B as one's standard of comparison,' or like ' A is different from B,' or sometimes nearer to the Ablative of the standard, sometimes nearer to the Ablative of 'difference';
(b) the Genitive: the original meaning may have been ' A is B's superior in greatness': cp. $\mu \eta \tau \rho o ̀ s ~ \delta i \delta a \chi \theta \epsilon i$ 's originally 'his mother's pupil,' $\sigma o \hat{v}$ $\delta a \mu \epsilon i ́ s$ originally 'your victim,' $\mu \eta \tau \rho o ̀ s ~ \phi \ell \lambda \eta \theta \in i$ 's originally 'his mother's darling,' $\rightarrow$ 'taught by his mother,' 'subdued by you,' 'loved by his mother' (v. further the Genitive case).
(c) Instrumental (occasionally found beside the wther two cases in Sanskrit) ' $A$ is greater comparel with B.' This may be partly due to the analogy of ' $A$ is not equal with $B$.'

[^2]The present meaning of $\mu \in i \xi \omega \nu$ tovitou (Genitive and (?) Ablative) and maior illo (Ablative and Instrumental) is perhaps nearer to the original meaning of the Instrumental than to that of the Genitive or Ablative.
 Principle XII. 3 and $v$. the end of the last chapter). It seems that in most sentences a $\pi \rho i \nu$ or $\pi \omega$ or $\pi \rho \dot{\sigma} \tau \epsilon \rho \frac{\nu}{}$ was originally essential to the first half in Parataxis. That is to say, although it is natural to say ' I won't go: I'll be hanged first,' it is not natural to say 'I won't go : I'll be shaved first,' if we mean to imply ' I will go when I have been shaved': the original form 'I won't go yet (or first): I will shave first' is natural, and in course of time the $\pi \rho i \nu$ etc. in the first clause ceased to require to be expressed, cp. Principle VII. (below). When the two sentences $\rightarrow$ one sentence 'I will not release her till ofd age come upon her' it is natural to extend the construction to the positive 'I will release her before old age come upon her,' where the paratactic meaning of 'I will release her : old age shall come upon her first' is impossible.
4. oî $\sigma$ ' ò $\delta \rho \hat{a} \sigma o y$ : when $\delta p a ̂ \sigma o v$ (v. Principle VII. 4) has come to mean 'do thou,' it may $\rightarrow$ 'thou shouldest do' (cp. 'Love thy neighbour as thyself' = 'thou shouldest luve thy neighbour as thyself'), 'thou knowest the thing which thou shouldest do' might have been like our couversational 'you know what you've got to do,' i.e. practically a command.
5. Dative of the Agent (cp. Principle V. B. .2, and v. the Dative).

The present meaning of the Dative of the Agent seems to be that of the Greek 'Genitive' with $\dot{v} \pi$ ' and the Latin 'Ablative' with ab: we cannot distinguish between the meanings of pareudum est miln 'I must obey' and parendum est a me 'I must obey.' This Dative may have been, in early times, a kind of Dative of the Possessor (cp. haec est milhi domus 'this is my house'), hoc est mihi agendum and actum 'this is my deed,' into which the context etc. infused a meaning ' not yet done' or 'already done'; hence 'this has to be done, or has been done, by me' [v. also Appendix VI.]. The remark of

Furneaux and most Grammarians about the Dative of the Agent denoting something which was to the interest of the agent is of course inapplicable: est mihi moriundum means that 'death or dying (abstract) exists for me,' and not that 'someone has to die for my interests'--we may say that the abstract idea (e.g. 'deed,' 'gift,' 'death') was originally looked upon as existing not as an advantage for the person but as a possession of his or as connected with him.

Another origin of the Dative of the Agent which will apply to some instances may be that e.g. notus 'known' comes to mean 'familiar' and so governs a Dative, just as words like 'friendly ' easy' etc. govern Datives.
6. Quumvis with the 'S'abjunctive': cp. naturam expellas furca tamen usque recurret for the original meaning, which was perhaps not very different, whether quamvis was expressed or not: quamvis meant 'as you like' (almost 'as much as you like') and 'you will do it (you are to do it, you may do it, you might do it), as much as you like, yet...' might $\rightarrow$ 'although you do it, yet...'
7. $\epsilon \grave{a} \nu$ é ê $\theta \eta \eta$ ö $\psi \in \tau a \iota$ (cp. Principle XI. 1) apparently sometimes developes from 'if he comes or shall come he will see' to 'granting or supposing his coming he will see': when this has happened one can say, by extension, $\frac{\epsilon}{\epsilon} \grave{\nu} \nu$ ë $\lambda \theta \eta$ ó ó $\hat{a}$ ' granting or supposing his coming he sees' i.e. 'whenever he comes he sees,' where ${ }^{c} \lambda \theta \eta \eta$, though originally future in meaning, has no longer this meaning: cp. si or eum veniat videt.

It is also possible that a form which was not 'present' was preferred to a form which was 'present' ( $\epsilon i$ ép $\rho \in \epsilon \tau a l$ ó $\rho \hat{a}$ ) because it did not imply that 'he does actually come.'1
S. The 'Ablutive' with utor-e.g. utor hoc, utor papavere: the present meaning is that of an Accusative of the Direct

[^3]Object: the original meaning may have been e.g. 'I have employment in this' (Locative) and 'I have employment with this' (Instrumental) $\rightarrow$ 'I-make-use-of this.' Allen and Greenough and most giammarians class this 'Ablative' with utor, like the ' Dative' with $\chi p \omega \mu a \iota$, as instrument, means, etc. But surely the nearest equivalent in English is 'I use something,' and the 'Ablative' has not a very different ultimate meaning from the Accusative which is found in Plautus.
9. 'Genitives' like $\nu v \kappa \tau o ̀ s, \pi o \hat{v}$ and the 'Genitive' Absolute: 'He went for a walk at night,' $\nu \cup \kappa \tau o ̀ s ~ o ́ \delta o ̀ v ~ є ̇ \pi o i ́ \eta \sigma \epsilon \nu$, and 'In what place did he go for a walk ?' $\pi o \hat{v}$ [тómov, ep. Principle VII.] óoon є̇ $\bar{\pi} \frac{i}{} \boldsymbol{\eta} \sigma \epsilon \nu$; 'in what place did he go for a walk ?' show a Genitive dependent on a substantive and not on a verb: from such uses it is a small extension to $\nu \cup \kappa \tau \dot{o} \dot{\rho} \dot{\delta} \delta \omega \pi o ́ \rho \epsilon \iota, \pi o \hat{v}$ ó $\delta \omega-$ $\pi o ́ \rho \epsilon \iota$; where the Genitive depends on a verb, and is practically equivalent to a Locative. The change is apparently not so much a change of the meaning of the Genitive as of the word on which it depends. Sometimes we have instances where a partial dependence on a substantive may have been felt: e.g. oi $\mu$ èv $\delta v \sigma o \mu e ́ v o v ~ ' \Upsilon \pi \epsilon \rho i o v o s ~ ' s o m e ~ a t ~ t h e ~ s e t t i n g-p l a c e ~ o f ~ H y p e-~$ rion,' and ó $\mu i ́ \lambda o v \pi o \lambda \lambda o ̀ v \in \epsilon \pi \epsilon \lambda \theta \dot{\omega} \nu$ 'advancing some way (making
 raíms 'there was seen no cloud over the whole earth.' Again, in a sentence like 'at the sun shining the heat is great' (ij $\lambda$ iov
 substantive $\theta \epsilon \rho \mu o ̀ v$, and a participle $\lambda$ ć $\mu \pi \sigma \boldsymbol{\tau} \tau o s$ added in agreement with $\dot{\eta} \lambda$ iou: from this it is a small extension to 'at the sun shining it is hot,' where we have a Genitive no longer dependent on a substantive but on a verb, and practically equivalent to e.g. a Locative [v. further under the Genitive in Greek]. The Ablative origin is not disenssed here, nor in 10 (below). Many transition uses may be seen in Homer.
 ciple IV. 7 and Principle V. A. 1). The present meaning is, perhaps, that of an Accusative of the direct object of a transitive verb: the original meaning might have been 'I have perception of this thing,' 'I have dominion over, I am master of,
 ＇he rules these men，＇and Daunus agrestium regnavit populorum （Horace），which is partly due to imitation of the Greek．The Greeks and Latins often expressed a person as＇doing＇some－ thing rather than as＇being＇something－it was more vivid，and， in these instances，aíatipouaı and крaт⿳⺈⿴囗十一 were obvionsly terser


11．Optative of Indefinite frequency in past time（cp．Prin－
 he will see＇：this sometimes $\rightarrow$＇granting or supposing his
 ＇granting or supposing lis coming he saw［on that occasion］，＇i．e． ＇whenever he came he saw＇［cp．also 7，above］．

Some practical conclusions from this Principle（which I have only partially illustrated here）are as follows：
（a）What is called the literal translation has often no longer the meaning which the words have for speaker and hearer；but the meaning which they may have had hundreds of years before－the meaning which，for purposes of merely trans－ lating（i．e．of giving the very nearest equivalent，in good English，of good Latin and Greek），we should absolutely ignore， however interesting it may be historicully．Schoolmasters often refuse to allow a boy to give the nearest equivalent，in English， of Greek and Latin constructions－they demand a＇more literal translation，＇which misses the exact shade of thought－and yet they refuse to accept a＇literal translation＇of good English into Greek and Latin，partly because it often misses the exact shade of thought．
（b）If one gives a certain original meaning to a case or mood etc．it is not a sufficient objection to this theory to say that this meaning is no longer present in a construction of this case or mood etc．There can be little doubt that the Ablative originally corresponded roughly to our＇from，＇＇out of＇etc．，and that the phrases $\begin{gathered}\epsilon \\ \xi \\ i \\ \text { ioov，ex lege are equivalent to what was }\end{gathered}$ once expressed by plain Ablatives：but we cannot fairly say that the Ablative did mot originally correspond（roughly）to our ＇from，＇＇out of＇etc．，simply becanse the present meaning of
these phrases may be 'equally,' 'legally': for it is possible that this meaning ('manner') was not original, but developed, without a corresponding change of form, from a meaning like 'starting from equality or law,' 'taking equality or law as one's standard.' Monro and Delbriick quite fail to realise this.
(c) If we classify constructions according to their original meanings we often have a different result from the result of classifying them by their present meanings [v. 8 above].

## On Principles II. and III. v. Appendix I.

II. Becanse a construction occurs in some one langrage of what is called the Indo-European group this is no proof that it certainly occurred in another language of the same gronp, still less that it was the only construction in that other language, but it suggests that it may possibly have occurred in another language at some time or another in a few or many instances. Starting from being different dialects of the parent speech, with a foundation of forms and syntax in common, all the languages have to a greater or smaller extent had their own gradual and separate development, which might differ according to the climate, the organs of speech, the food, the scenery, the surrounding countries and peoples, the conditions of literary development, and the character and modes of thought and political constitution and customs of the people who formed the language.

Thus, because we say 'deficient in' (Locative), it does not follow that Greek used only a Locative in this construction. And because Sanskrit used a Locative Absolute, it does not follow that Latin used only it Locative in this construction: the evidence of hoc donō acceptō (Ablative and (?) Instrumental) disproves it. This principle might be illustrated ad infinitum: it has been entirely ignored by Delbriick and Allen and Greenough in their treatment of the Latin Ablative, and by Monro in his treatment of the Greek 'Dative.'

They pretend that because early Sanskrit used certain cases to express certain things, therefore Classical Latin and Homeric Greck also certainly used these cases to express these
same things, and coutd never have come to use any other cases to express these things.
III. In Greek and Latin there are certain Syncretistic or Amalgamated parts of speech (cp. Principle VI. and Chapter II.). Amalgamation (cp. Chapter II.) is of different kinds. The following scheme seems to give a few of the possibilities : but (v. end of Appendix I.) it is far from complete.

In Latin: (a) the 'Genitive' is Genitive (e.g. mentis) + Locative (e.g. animī) + a fossilised Adjective (e.g. animorum) :
(b) the 'Ablative' Singular is Ablative (e.g. mensā) + Instrumental (e.g. mensī and mente) + Locative (e.g. mente):
(c) the 'Dative' and 'Ablative' Plural is in form apparently (?) Dative (e.g. dominīs) + Locative (e.g. dominiss) + (?) Ablative or (?) Genitive (e.g. turribus). These forms have also been extended over the meanings of the Instrumental case in the Plural, unless turribus is partly Instrumental:
(d) the 'Subjunctive' is Subjunctive (e.g. ferat or dixerit) Optative (e.g. sit or dixerit) :
(e) the 'Perfect' is Perfect (e.g. amavi) + Aorist (e.g. dixit): some forms are, as it were, a blend of Aorist and Perfect forms, containing an element of both.

In Greek: (a) the 'Genitive' is Genitive (any singular form
 fossilised Adjective (any 'Genitive' Plural) :
(b) the 'Dative' Singular and Plural is Dative (e.g. 入ó $\gamma \omega$, $\lambda o ́ \gamma o \iota s)+$ Locative (e.g. $\dot{\rho} \eta \mu a \tau \iota, \dot{\rho} \eta \mu a \sigma \iota$, 入ó $\gamma \boldsymbol{\imath}$ ). These forms have been extended over the meanings of the Instrumental case in the Singular and Plural, unless e.g. oó $^{\boldsymbol{\gamma} \boldsymbol{c}}$ is a form of it.

By Amalgamation of A and B into a whole it is meant that, in most constructions of the Amalgamated whole $\mathrm{A}+\mathrm{B}$, the meaning is the same whether the form which survives be always A , or always B , or sometimes A and sometimes B , or a blend of A and B : to take an instance, by the Amalgamation of the Ablative and Locative and Instrumental into a whole it is meant that in most constructions of this Amalgamated whole (the Latin 'Ablative') the meaning is the same whether the
form which survives be Locative (e.g. his donis acceptis), or Ablative (e.g. hoc dono acccepto), or Instrumental (e.g. hoe dono accepto): this does not apply to every declension.

Now we have to try to refer back any given construction of these Amalgamated parts of speech (e.g. hōe donō) to their original sonrces (e.g. to say whether hōc donō is, in origin, Ablative, Locative, or Instrumental). We must obviously decide on some definite plan. Allen and Greenongh (v. p. 245 and Appendix I.) would say (and 99 out of 100 grammarians would agree with them) that in a construction like hoe dono or his donis egeo, it is Ablative only, and in a construction like hoc dono or his donis utor, Instrumental only, and in a construction like hoc dono accepto or his donis acceptis, Locative only. Whatever its form, it is supposed by them to vary its origin according to the context, and its origin is to be decided by the meaning, apart from the form.

But this is ridiculous: suppose diet̄̄ is 'Ablative in form,' then we do not call it Nominative directly it has the meaning of a Nominative (in e.g. difficile est dictu quid fecerit), but we eall it an 'Ablative' becanse it is an Ablative in form, and we realise that here (cp. the English Dative 'it is hard to say what he lias done') the 'Ablative' has extended over the meaning of the Nominative, and we have to show how it has done so, rather than shirk the difficulty by calling it a Nominative. Similarly, if hoc dono is Ablative and Instrumental in form, strictly speaking it camnot be (as most grammarians call it) a Locative only, but it is Ablative and Instrumental in meaning also: we have to show how an Ablative and Instrumental can extend over a Locative meaning, just as, vice versa, we have to show how a Locative can extend over e.g. Ablative and Instrumental meanings in his curis liberare. Again if $\pi \epsilon \delta_{i o t o}\left(\theta_{\epsilon}^{\prime} \epsilon \nu \nu\right)$ is in form Genitive and Adjectival, it is in meaning Genitive and Adjectival also, and we have to show how a Genitive and Adjcetive can extend over meanings once denoted by e.g. the Locative of 'place where.' Again no one would call the 'Subjunctive' in tam stultus erat ut abiret an Indicative, merely because it expressed a fact, and not the original meaning of the 'Subjunctive' (e.g. futurity): evergone should call it 'Subjunctive,'
because it is 'Subjunctive' in form, and should try to explain how a 'Subjunctive' can extend over an Indicative meaning. And everyone ought, strictly speaking, to apply the same test to every construction, and refuse to accept such mbbish as that hoc dono accepto or (it clamor) caelo is Locative only. We must, then, start with the fact that the only real test of original sources is the test of forms:

We may take it as a general rule that a certain form was used because it conveyed a certain meaning, both for speaker and hearer, which was required to be conveyed, and not because some other form could also express that same meaning. The latter construction is interesting as a parallel, rather than as a cause, of the first construction. If 'A is used where we should expect B,' then, however interesting it may be to have expected wrong, we have not explained the origin of the construction A nor the reason why we have expected wrong-which generally is that Greek and Latin constructions are not directly modelled on English idioms, but were developed by Greeks and Latins!

If we have a Latin form which is Optative it must be Optative in meaning also (e.g. sit); a Locative form must be Locative in meaning also (e.g. dominī and $\pi a \tau \rho i ́)$; a Dative form must be Dative in meaning also (e.g. रa $\alpha a i$ ); so in referring back these amalgamated parts of speech to their component parts, the forms should be the only guide: strictly speaking, probably every dominī is a Locative and every regis is a Genitive : but as domini practically has exactly the same meaning as regis, it is more convenient to call both domini and regis Locative and Genitive. And again $\chi a \mu a i$ is Dative and $\chi \theta$ ovi is Locative : but as $\chi a \mu a i$ has the same meaning as $\chi$ Өovi it is more convenient to call both $\chi a \mu a i$ and $\chi$ Өoví Locative and Dative, although, strictly speaking, we ought to call $\chi a \mu a i$ Dative only and $\chi \theta o \nu i$ Locative only.

As a rule the uses of the Latin Ablative and the Greek Dative are referred to one of the original heatings only, on the ground of the uses of the cases in early Sanskrit. But because a construction was used in one language it does not follow that it was certainly used in another, or that it was the only con-
M. T.
struction in that langrage, but it follows that it might have been one of the constructions used: e.g. 'it's me' is found in English, but where is est me found in Latin, and $\epsilon \in \tau i \mu \epsilon$ in Greek? [cp. Principle II. above].

On referring amalgamated parts of speech to their origins one has, for purposes of comvenience, to refer every construction to both origins, possibly :

1. anime dubius: the Genitive of this Declension apparently does not survive; it would be animis perhaps, or else animōs [v. end of Appendix I.]. Animi (mente) dubitare and dubius 'to doubt, and doubtful, in one's mind'; animis (mentis) dubitatio 'doubt in one's mind.' 'Then extensions are natural from animi dubitare and dubius to animi dubitatio (which has entirely superseded animīs dubitatio) ; from animīs (mentis) dubitatio to animis (mentis) dubius and dubitare (v. Principle V.) : some forms dropped out because there was no need to have two forms to express a single meaning.
(This does not take into accomnt the Ablative and Instrumental constructions.)
2. magni emere-pluris emere: pretii was probably originally expressed, but the construction came to be quite clear without it, and so it could be dropped: ep. calida (aqua)-vi $\sigma \tau \epsilon \rho a i ́ a$ ( $\eta \mu \epsilon ́ \rho a)$-meà (re) interest, v. Principle VII. Strictly speaking probably magni is Locative and pluris Genitive everywherebut as they have the same case-meaning it is more convenient to call them both Locative and Genitive :
with emere e.g. a Locative would be used-emere magni :
with emptio, or equos, a Genitive-emptio or equos (?) magnis or pluris.

Then, by extension, emptio magni from emere magni, and emere (?) magnis or pluris from emtio or equos pluris (v. Principle V.) : then some forms died out, e.g. magnis was entirely superseded (cp. риктós and $\nu \boldsymbol{\varepsilon \tau \tau i}$ ). This does not take into account the Ablative and Instrumental constructious.
3. mē̄ (re) interest or mē̄ réfert-Caesaris interest or rēfert: meā and rē between them apparently contain the forms of Ablative, Locative and Instrumental :

The original meanings may have been among the following :
(a) meà ree fert: fert = фє́ $\rho \in \iota$ 'it tends,' 'it goes ': ( $\phi \epsilon ́ \rho \epsilon \iota$ $\kappa a \tau$ ' oúpò 'it goes with the wind'): Ablative 'according to my interests' (cp. ab re eius and ex tuā re and ex meā sententia 'according to my wishes or views'), Locative 'in my interests,' Instrumental 'with my interests': then ree became glued to fert, by constant association :
(b) meä re interest: interest 'there is something between,' 'there is a difference,' 'it makes a difference,' 'according to, in the sphere of, with respect to, my interests': then re became unnecessary in this context, and so was dropped (cp. repetundarum (rerum) and Principle VII. and footnote at the end of Appendix I.).
4. prudenticu or veritate confidere: (the Dative origin is not consillered here): here we have the forms of all (?) three cases, and the prudentia or veritas might have originally expressed the source of the confidence (cp. de prudentia confidere), Ablative; or the sphere of the confidence (cp. in prudentia confidere 'to trust in'), Locative; or 'with respect to or by means of,' Instrumental.
5. $\tau \grave{\lambda} \lambda \eta \theta$ є̀s civ $\theta \rho \dot{\epsilon} \pi о \iota \sigma \iota \nu$ ov̉ єर́рі́бкєта८: à $\theta \rho \omega \dot{\pi} \pi о \iota \sigma \iota \nu$ is in form a (?) Dative and Locative. Possibly no Instrumental survives in Greek except in adverbs like ä $\mu a, \mu \in \tau a ́, \pi a ́ \nu \tau \eta$, $\delta \iota \pi \lambda \eta$ etc.: original meanings might have been 'the truth is not man's discovery' (v. Principle I. 5) $\rightarrow$ 'the truth is not discovered by men,' Dative: Locative 'among men'; the Instrumental 'by men' (cp. Sanskrit) has apparently been superseded by the other two cases; i.e. perhaps after two or three cases had come to have the same meaning, one form was allowed to fall into disuse while the other form or forms survived with the meanings which were once denoted par excellence by the disused form: or is $\lambda o \gamma^{\prime} \omega$ Instrumental also?
(6. $\mu \in i \zeta \omega v$ тov́тov. It is in form Genitive and Ablative (?), v. end of Appendix I.: in meaning it might have originally been Genitive 'his superior' and Ablative 'greater starting from him as a standard of comparison' etc. (cp. Principle I. 2).

## 7. Subjunctive and Optative:

quambis sit (Optative) or ferat (Subjunctive): v. Principle I. 6 : the present meaning is 'although it may be,' or 'although it is' = quamquam est. It is usually given as jussive, but it must be remembered that the negative is non, not ne-quamvis originally meant (almost) 'as much as you like'; 'it will be,' 'let it be' (concession), 'it might be' were (possibly) early meanings.
8. dixerim (hoc unum dixerim): perhaps both Subjunctive and Optative in form (v. Appendix III.). It is generally called a polite or modest assertion: but the Latins were not given to modest assertions: 'I will say,' 'let me say,' 'I wish to say,' 'I might say' are all possible early meanings.
9. dixerit aliquis: 'someone will say,' 'let someone say,' 'someone might say' are all possible early meanings.
10. Deliberative: quid fuciam? (quid sit ?) 'what will I do?' (Irish and Scotch) ep. 'what will you do?' 'What will poor Robin do then?' 'what do you command or advise me to do ?' 'what can $I$ do ?' are all possible early meanings.
11. Aorist and Perfect: haec dixi-as Aorist it would mean 'I said this in the past'; as Perfect (?) 'I am in the present condition of having said this.' Often the meaning may lie between the two, and lie between expressing a past act or a present state of affairs: hence haec dixi ut scias or scires:

In referring constructions of amalgamated parts of speech to their origins a parallel construction with a particle or preposition may be used as evidence,
e.g. veritute ficlere ( 4 above): cp. de veritate, Ablative; in veritate, Locative:
'Ablative' of manner, e.g. bene 'well,' cp. ex aequō ('fairly'): cum (summāa) virtute, and the Greek èv סiкп 'justly.'

## IV. Logical Grammar is often different from formal

Grammar: i.e. the exact shade of meaning of a construction from the form by which it is expressed (cp. Principle I. which is not always distinct from this, and the Addendum to this Chapter):

1. (u) mor'tuos Cuesur meant, not 'Caesar when dead,' but 'the death of Caesar,' 'the fact of Caesar's dying':
 ėкєìvo $)$ meant, not 'I know you not being good,' but 'I know the fact of your not being good' (almost oỉda tó $\sigma \epsilon \mu \eta \eta_{\text {eivea }}$ ajaOóv: hence the $\mu \dot{\eta})$, which shows that though the form is personal and concrete, the meaning may sometimes be abstract:
(c) ruptue assiduo lectore columnue (Juvenal) meant 'the columns broken' not 'by the assiduous reader,' but ' by the assiduity of the reader or reading': Pliny says of a country imbecillis cultoribus fatigatur 'it is spoilt by the weakness of the cultivators or cultivating': cp. Propertius formosia Lycoride mortuos 'slain by the beanty of Lycoris,' and occisus dictator pulcherrimum facinus videbatur' the slaying of the dictator was thought a very noble deed ':
(d) medīe Italīe 'in the middle of Italy': totā Italia 'through the whole of Italy':
(e) cupidus huius rei ayendue 'desirous of doing this thing,' not 'desirous of this thing being done': v. end of Chapter.
2. Marte populata nostro: curatus inaequali tonsore capillos: here, what is in form a person (Mars or tonsor) is in meaning a thing, 'war' and 'shaving':

The principle underlying all these instances is the preference of the concrete form to the abstruct form: the meaning was not always concrete, and often the concrete form satisfied the cye and the ear rather than the mind, which grasped the abstract meaning. One or two things may be noticed: firstly, Latin often denoted this meaning by the order of words, putting the adjective or participle in the emphatic position. Greck could also produce the same meaning without the 'Article': e.g.
 the meaning is крєî $\sigma \sigma o \nu$ रोग ( $\tau$ ó) $\sigma \epsilon \mu \eta \kappa$ ќт $\tau^{\prime}$ єival (v. A. Sildwick in the Clussical lieview). But more often it denoted this

 đòv àrต̂va. Sccondly, it is pussible that this meaning was not always present ; e.g. in 'I know this thing' we have a complete
sense, and 'that it is so,' 'being so' may have originally been added epexegetically (cp. the Accusative and Infinitive under
 $\dot{\omega} s$ oüt $\omega$ s ë $\chi \in \iota, \rightarrow$ 'I know that this thing is so,' we can say
 that his brother was in distress'; cp. Latin Quid censes hunc ipsum S. Roscium quo studio esse etc. (Cicero). This form may have been preferred because, just as the Nominative of the main subject often comes first in the sentence, so the introduction of the second subject may have been made early in the sentence: cp. in the Bible 'Whom (not Who) say ye that I am ?'

It is to be observed that the Greek participial idiom with verbs of perceiving etc., to which sensit medios delapsus in hostes (Vergil) is the nearest equivalent in Latin, is almost entirely due to the substantive + the participle having had an
 (Herodotus) 'I find the accruing of additional glory to us' i.e. 'I find that it will accrue to us': v. Addendum to this Chapter.
3. (a) The instances may also be called instances of Contamination,' v. Principle V. B.

Here, formally, the subject of the first line is the person who displeased, or the circumstances, or the conduct of the person ; logically, Agamemuon is so far felt to be the real subject ('Agamemnon was not pleased ') that the sentence goes on as if he had been the real subject.
 enemy' are put into the Nominative, perhaps not because the Nominative has any strict grammatical construction, but because the enemy are felt to be the logical subjects, or persons spoken
 ruîa shows a logical Accusative of the same kind, or else oi $\mu \grave{\iota} \nu$ is logically 'partly': v. further the Accusative, C.)



бокю 'I think good' is often, logically, бокє $\hat{\imath}$ ноь 'it seems good to me': or else $\delta \iota a \lambda \epsilon \gamma o ́ \mu \epsilon \nu o s$ is logically 'as I was conversing,' and is put in the Nominative because it is felt to be saying sometling about the real subject of the sentence, є่ $\gamma \omega$.
 here, perhaps, $\dot{\eta} \xi^{\prime} \nu o \delta o s ~ \hat{\eta} \nu$ is, logically, 'they joined in contlict,' and 'Apreioc is Nominative in apposition to this logical Nominative.
 тò $\sigma \tau \rho \dot{\prime} \tau \epsilon v \mu a$ is, in form, a neuter singular, in meaning a masculine plural ('the troops'): ко́ттоутєs is made to agree with the logical meaning: cp. purs ingenti subiere feretro (Vergil).
 'the wise must not serve the (?) foolish': $\delta o u \lambda \epsilon \nu \tau \epsilon \in \circ$ is, in meaning, $\delta o v \lambda \epsilon v \in \epsilon \iota \nu \epsilon \hat{\imath}$ : and sometimes the sentence is continued with an Infinitive as if $\delta o v \lambda \epsilon v \in \iota \nu \quad \delta \in \hat{\imath}$ had been actually
 avंт $\eta \nu$. (Cp. the Introduction, oî $\sigma \theta^{\prime} \hat{o} \delta \rho \hat{a} \sigma o \nu$.)
6. Early grammar was, to a great extent, logical as well as strictly grammatical. An Accusative could be governed by a transitive notion: if an adjective or noun had a transitive notion, it could govern an Accusative of the direct object: if a verb had not such a notion, it could not govern such an Accusative, except by analogical extension, i.e. such an Accusative was governed less by 'a verb in name' than 'by a verb in nature': cp. hunc tactio 'touching this man,' $\sigma \grave{\text { é }} \phi \dot{v} \xi_{ı} \mu o s$ 'able to escape you': a + versari hominem (cp. spernere hominem) 'scorn, spurn, loathe, a man' (formally, 'turn away from'): є́ $\xi-i \sigma \tau a \sigma \theta a \iota \pi o ́ \lambda \iota \nu$ (cp. $\lambda \epsilon i \pi \epsilon \iota \nu$ тó $\lambda \iota \nu$ ), 'leave, quit, a city' (formally, 'rise out of'): and Sanskrit offers an enormons number of instances (where often English has no transitive equivalents) of adverbs, substantives, and adjectives governing Accusatives originally in virtue of a transitive notion.
7. A Genitive could similarly depend, not only on a substantive (every substantive is of course capable of having a substantival notion), but also on a substantival notion, even if
it were expressed by what was formally an adjective, adverb, or verb: à $\dot{\alpha} \dot{\sigma} \sigma \sigma \epsilon \iota$ or $\beta a \sigma \iota \lambda \epsilon \dot{v} \epsilon \iota$ originally governed a Genitive in virtue of its verbal furce, 'he is king,' 'he has dominion' (aided by the analogy of the Genitive with the substantive groups, 'king,' 'dominion,' etc.: v. Principle V.). Similarly є̇ $\pi \iota \tau \rho o-$ $\pi \epsilon$ v́ovia (Herodotus viI. 7) governed a Genitive originally because it was, logically, 'being è $\pi \iota \tau \rho o \pi \epsilon u ́ s$.' The Greeks and Latins often preferred to express a person or thing as 'doing' something rather than as 'being' something : cp. also Principle I. 10 .
8. Dulce ridere, $\dot{\eta} \delta \dot{v} \gamma \in \lambda \hat{a} \nu$. In ridere and $\gamma \in \lambda \hat{a} \nu$ there is no formal substantive, but there was once a logical substantive 'smile' ('to give a smile' or 'to smile a smile'), which dulce and $\dot{\eta} \delta \dot{v}$ qualified just as e.g. dulcem would qualify risum. Then, ultimately, the meaning became 'to smile sweetly.'
 formally, a singular, but logically it is practically a plural 'whatsoever things,' and ä äavтa agrees with this logical

 and this 'everybody' is the subject of 廿'é $\gamma \in \iota$.
10. Verbs compounded with 'Prepositions,' which were for the most part adverbs in origin, were not always compounded with them formally; it was often sufficient that the meanings should form composite notions, even if the forms were separated by many intervening words: cp. oüs $\pi o \tau^{\prime} a \pi^{\prime}$ Aiveià é $\lambda o ́ \mu \eta \nu$ (Homer) where oús was governed by the transitive idea 'I took' and Aiveian (originally) by the transitive idea of 'I deprived' contained in aimò and é $\lambda o ́ \mu \eta \nu$, which worls, however, are not formally compounded.

## V. Analogy and Contamination :

Analogy is the most important influence in the formation of language. To take a simple instance, we know how to decline tabula not because we have learnt to decline $i t$, but because we know how to decline mensa, and the declension of tabula was worked out by a (semi-meonscious) proportional analogy, thins:
mensa : mensam, mensae, mensā :: tabula : $x, y, z . \quad x=$ tabulam, $y=$ tabulac, $z=$ tabul $\overline{\mathrm{a}}$.

Similarly if a child says 'it hitted me,' the child forms the word 'hitted' by proportional analogy, thus :
love : loved : : hit : $x . \quad x=$ hitted.
This sounds very abstruse, but it is really very simple.
In Morphology we see how A nalogy brings words which are comected in meaning into formal connerion with one anotherso in syntax there is a tendency for words which are connected with one another in meaning to take the same construction as one another (either occasionally, or usually, or always).
A. 1. With крatê 'conquer' the natural construction would seem to be the Accusative of the direct object-when $\kappa \rho a \tau \hat{\omega}$ meant 'I am the victor' or 'I have the victory', it would naturally take the Genitive: cp. Principles I. 10 and IV. 7. So that there was a struggle between the Accusative and the Genitive. The Genitive superseded the Accusative because it was frequently used with Substantives connected with $\kappa \rho a \tau \hat{\omega}$ by a commou meaning of 'victory' -e.g.
(a) кри́тоя, аи̇токра́ттр:
(b) а̇кратйs:

(d) $\hat{\eta} \sigma \sigma a$, $\delta o \hat{\lambda} \lambda o \varsigma, ~ i . e . ~$
(a) words connected in form and meaning:
(b) words comnected in form und opposite in meaning:
(c) words connected in meaning, not in form:
(d) words opposite in meaning und not connected in form. These groups are not always separate.

It must be obvious that the use of the Genitive would, as a rule, be frequent or the reverse with verbs, etc., chiefly in proportion to the frequency of its use with substantives connected in meaning.
2. One would expect ( $(1)$ to have the least influence, but it is important: 'parted from' is quite elear, but on the analogy of '(no longer) joined with' etc. we say 'parted with' (ep. Sanskrit) and 'differ with' (discrepare cum), on the analogy of
'(not) agree with' (congruere cum): perhaps 'buy for sixpence' was partly due to the analogy 'sell for sixpence,' i.e. 'sell in order to get sixpence.' In Greck the 'Genitive' case is Genitive + Ablative, and some Greek 'Genitives' are hard to explain satisfactorily apart from D, e.g. with words of 'beginning,' 'hitting,' 'touching.' They may be partly due to the Ablative with words of 'leaving off,' 'clesisting from,' 'erring from,' ' leaving go of ' or ' keeping away from.'

The Latin-Greck Dative with verbs of 'taking away' is partly due to the Dative with verbs of 'giving to'-and so it is possible that the construction with words of 'abunclunce' may extend to words of 'want' and vice versâ.
3. sunt qui viderint means 'there are people who have seen' and practically $=$ sunt qui viderunt (as a rule) : non sunt qui viderint had, as one of its meanings, 'there are no people who can have seen' $\rightarrow$ 'there are no people who have actually seen' $=$ non sunt qui viderunt: hence, sunt qui viderint, by analogy, is used, meaning' there are people who have actually seen ': (cp. Principle V. A. 3).
4. خ’ро́ $\mu \nu \quad \tau i$ тоьoî $\iota$, rogabam quid facerem: meaning 'I asked what I was doing.' The question, put directly, is $\tau i$ emoóouv ; quid faciebam? or quid feci? This is chiefly on the analogy of the deliberative question: these constructions originally meant ' I asked what I was to do or what I could do etc.,' which sometimes $\rightarrow$ 'I asked about my course of action,' which again sometimes $\rightarrow$ 'I asked what I was doing': ср. oïo $\mu$ a $\pi o \iota \eta \sigma a \iota$ 'I have ideas $\left.\begin{array}{c}\text { thoughts }\end{array}\right\}$ abont the doing of it' $\rightarrow$ 'I think I shall do it,' or 'I think I did it': (cp. Principle XI. 5).
5. The French Seasons: they are connected with one another by no other link save that of being names of seasons, yet l'été feminine (cp. aestatem) becomes masculine because it is associated with the other three seasons, which are masculine. Similarly in Greek there are many instances-in some the exact analogy can no longer be traced-akin to $\dot{\eta}$ ép $\sigma \eta$ 'dew' extending $\dot{\eta}$ to $\delta \rho o ́ \sigma o s$ 'dew.'
B. There is another branch of Analogy called Contamina-
tion: it is very rarely separate from analogy. Two normal constructions are combined in a single construction, which must necessarily clearly convey the required meaning. The cause of the new construction is sometimes the desire for brevity, and occasionally for a striking effeet, but sometimes Contaminations are unavoidable. Many people say ' Don't come unless you can possibly help it' by a natural contamination of 'Don't come if you can possibly help it' and 'Don't come unless you are obliged.' Hundreds more instances like this might be quoted.

 abdere se in aliquem locum of abire in aliquem locum and in aliquo loco (ibi) se abdere.

1. Unfulfilled Purpose in Greek: тí $\mu$ ’ oủк є้ктєєขas ás є́ $\delta \in \iota \xi a \quad \mu \dot{\eta} \pi \sigma \tau \epsilon$; 'why did you not slay me in order that I might never have shown?' expressing 'but I have shown.' Normal constructions are:


 the past if they had been spoken).

These are combined in the above construction: no other construction conveys the meaning so well: is (íva) $\mu \dot{j} \pi \pi=\tau \epsilon$ is necessary because the idea of purpose or object has to be conveyed: $\delta \in i \xi a \iota \mu$ might lave been used (would have been used by Homer), only it would not clearly express 'but I have shown,' i.e. that the purpuse was unfulfilled, whatever it might imply. The past indicative was preferred because it put the matter beyond recall: the other moods had not the Augment and so could rarely express past time unmistakeably: ep. the unfulfilled condition in Present time $\epsilon i$ є́ $\pi$ oíє jóoíкєь ä $u$, si faceret erraret, where the past tense was used partly because it puts the matter beyond recall, which idea the 'present' optative could only imply, but could not clearly express.
2. Scriberis Vario fortis et hostium victor Nueonii carminis alite (Horace). If alitī were the reading Vario would be Dative of the Agent-a nomal construction in poetry; on the other
hand, if alite be the correct reading-it is the harder readingHorace is too correct in his Latin to use a simple 'Ablative' of the Agent without ab. It seems that the Dative of the Agent (cp. Principle I. 5) developed from e.g. hoe est mihi agendum 'this thing is my deed' into 'this thing is to be done by me,' where mihi $=$ a me: scriberis Vario (Dative) logically $=$ scriberis a Vario ('Ablative')-then alite is put in the case to agree not with the Dative but the 'Ablative'-in other words seriberis Vario alite is a contamination of scriberis a Vario alite and Vario alitī, helped out by the intervening words, and by the Dative and 'Ablative' having the same form in this declension.
3. $\chi$ Өovi $\pi \epsilon \in \sigma \epsilon$ : cp. English 'I go there' $=$ ' I go thither.' $\chi \theta$ ovi like $\pi o \hat{\imath}$ is a Locative form, and so it originally expressed 'place at which'; as English ' $I$ go there' is partly due to contamination of 'I go thither' and 'I shall be there,' so $\chi$ Өovi $\pi \epsilon \in \epsilon$ was partly due to contamination of 'it fell to the ground' and 'it was on the ground.' The Locative expressing purposeLatin egit visere (Horace)-is partly an extension from the Locative expressing 'place to which.' The reverse contamination takes place in Greek $\chi a \mu a i$ ' on the ground ' (Dative) and єis 'Eєßátava ámoӨavєì, a contamination of 'to go to E.' and 'to die at E.' : © ep. the English song
> 'If I were to tumble in It's a fact I couldn't swim And quickly to the buttom should be.'

Other instances would be the dialectic English 'he isn't to home,' insula Delos in Aegaeo marī posita, oi è $\nu \tau \hat{\varrho} \hat{\jmath}$ 'Hpaíc

4. quin abī: originally quī-n(e) in this construction was perhaps an adverb (Locative etc.), somewhat equivalent in its meanings to our 'at what,' 'in what way,' 'on what grounds,' etc. etc. and so the original meaning of quī-n(e) abis? was something like 'why do you not go away ?' this developed into an imperatival meaning, practically 'go away,' and a contamination of the phrases quin abis? and abī (which had the same meaning) produced quin abī, which construction was one reason why quin cane to express 'nay.'
5. Rediit paullo post quod se oblitum nescio quid diceret: rediit quod oblitus esset meant 'he returned becanse he said he had forgotten' (the Indicative oblitus erat would make the writer responsible for the statement oblitus est, and would make the writer give oblitus est as the canse for rediit)-and rediit quod se oblitum dixit is good Latin also. These are contaminated in the above construction.
 ally, practically had the meaning of a future (cp. Chapter II.), is here partly due to a contamination of 'they are' and 'they will prove to be': cp. hosiers' 'This glove will be your size.'
7. The Epistolury Aorist and Perfect (e.g. misi, ë $\pi \in \mu \psi a$, $\pi \epsilon ́ \pi о \mu \phi a)$ are partly due to contamination: suppose A writes to B-then A's point of view is 'I (A) am now sending,' B's point of view is 'A has sent': these are combined in misi, ধ̈ $\pi є \mu \psi a, \pi \epsilon \in \pi о \mu \phi a^{\prime} \mathrm{I}(\mathrm{A})$ have sent.'
S. legitur (in the following accomnt of the -r of the Latin Passive I hope I may be excused for using a form which, I believe, is not actually found anywhere). It is possible that Latin used a form parallel to the Greek ( $\left.{ }^{\epsilon}\right) \lambda$ é $\gamma \epsilon \tau o$ to express 'it is or was chosen' i.e. id legito : side by side with this id legito 'it is or was chosen ' another form ill legur or id eligur came to have the same meaning, viz. 'it is or was chosen.' Apparently these two forms legito and legur or eligur, having the same meaning, were contaminated in a single form legitur or čligitur, meaning 'it is chosen.' As to legur or éligur' (cp. Umbrian ferar, ier, Osean lamatir, karanter, vincter, Old Irish doberr, Sanskrit nemur, adur, avautsur, apāviṣur), it was originally a third person plural active, alternating with the form in -nt (cp. $v ँ \delta \omega \rho$ beside udntos $\rightarrow v \approx \delta a \tau o s)$, and later on set apart to express the impersonal 'people choose or chose,' ' one chooses or chose ' (cp. ferunt 'people say') : then e.g. èligur ill (like the French on dit) $\rightarrow$ 'it is chosen,' just as ferunt cum abiisse often logically means 'it is said that he departed.'

The following instances are quoted almost everywhere,

[^4] 1890.
but it may be as well to repeat them here, although they are the stock instances.
 (or $\pi \lambda i j \nu$ ) 'apart from' or 'except' and $\epsilon i \mu i \lambda$ ' except.'
10. $\mu$ óvos $\tau \hat{\omega} \nu{ }^{\prime}\langle\lambda \lambda \omega \nu$ is due to a contamination of 'he alone of all' and (perhaps) 'alone as distinct from the others.'
11. $\mu \hat{a} \lambda \lambda o \nu \quad \eta \quad \eta \quad o \dot{u}$ is partly duc to a contamination of 'rather than' and 'rather and not'-cp. 'better nor him,' and certain Sanskrit constructions ; the French plus qu'il n'avait is partly due to a contamination of 'more than he had' and 'he had not any more.'
 contamination of ' more worthy of mention than the preceding ones' and ' most worthy of mention of all'-cp. Milton's ' fairest of her daughters Eve.'
13. oi $\mathfrak{\epsilon} \kappa \tau \hat{\eta} \varsigma \nu \dot{\eta} \sigma o v$ is partly due to a contamination of 'those on the island' and 'those who (would) start from the island,' or make it their $\dot{\iota} \phi о \rho \mu \dot{\prime}$ etc.
 (Sophocles) is partly due to a contamination of $\sigma \in \delta \in \hat{\imath} \ldots$..ѐкк $\lambda \in \epsilon^{\pi}$ $\tau \epsilon \iota \nu$ and $\kappa \epsilon \lambda \epsilon \dot{v} \omega \sigma \epsilon$ öт $\pi \omega \varsigma$ е̇ккл $\hat{\epsilon}^{\prime} \psi \epsilon \iota \varsigma$.

 and öть $\delta \iota a \phi \theta a \rho \eta{ }^{\prime} \sigma о \nu \tau a \iota$, which would have the same meaning.
VI. Amalgamated parts of speech (cp. Principle III. and Appendix I.) do not necessarily contain every construction which their component parts have ever had, and no construction which any other part of speech has ever had : e.g. the 'Genitive' in Greek is Genitive + Ablative, but it does not contain every construction which the Genitive and Ablative have ever had, and no construction of any other case (e.g. of the Dative).

It is usually thought heresy to say that there was any connexion between the Genitive and Locative in Greek: but if

 etc. etc., are 'Genitives' with the meanings which once could
not have been expressed by the Genitive or Ablative but had to be expressed by e.g. the Locative, what is the exact advantage of denying that the 'Genitive' has here extended over a Locative meaning? No one, I think, denies that $\pi o \hat{v} ;=\mathrm{a}$ Locative 'at what place?' or that Kúpou aimotavóvios is equivalent to a Locative Absolute in Sanskrit; some try to distinguish between $\nu \cup \kappa \tau o s$ and $\nu \cup \kappa \tau i$ by saying that $\nu v \kappa \tau \grave{i}=$ 'at night,' עuктòs 'at a certain time within the night,' without pointing out either
(a) the exact difference between the two meanings, or
(b) why the 'Genitive' should express 'time within which' any more than the Locative does, or
(c) whether it does do this and does not also express 'time at which.'

To illustrate the above Principle, it seems that

1. The Genitive + Ablative in Greek does not contain every construction which these two cases have ever had-e.g. with verbs of 'depriving' the Ablative would seem to be the original case, and yet we find not only an Ablative but also a Dative, $\tau \hat{\omega} \delta \epsilon$ á $\phi \epsilon i \lambda \epsilon \tau o$ (cp. Latin and v. Principle V. A. 2). Again, with substantives the Genitive would seem to be the original case to express the 'possessor'; and yet we find "Екторь Ouнós beside" Ектороя Ou
2. The Genitive and Ablative in Greek have extended over certain constructions of other cases: e.g. we have already seen extensions of the 'Genitive' over the Locative's gromed ; again, it seems that the Dative was the original case to express the 'purpose' or 'object' of a verb (cp. the Datival 'Infinitive' in Greek and the regular Sanskrit construction), and it seems that the Genitive was not originally used here; and yet we find, in Greek, $\hat{\eta} \lambda \theta \epsilon \tau o \hat{v} \dot{a} \phi a \iota \rho \epsilon \hat{\nu}$, and $\tau o \hat{v} \mu \hat{a} \lambda \lambda \lambda_{0}$ í́vaı т⿳亠̀s $\pi \rho o \sigma o ́ \delta o v s ~ a u ̀ \tau \hat{\varphi}$ (Thucydides) (cp. Tacitus, proficiscitur cognoscendae antiquitatis). Again, the 'Genitive' seems to extend over the Accusative of the direct object of a transitive verb (where it seems that the Genitive could not have been
 (cp. meminī in Latin and v. Principles I. 10 and IV. 7).

Similarly, the Subjunctive and Optative have amalgamated in Latin: but they do not contain every construction which the Subpunctive and Optative have ever had, and they do extend over some Indicative constructions: e.g. in trudebantur ni instruxisset, trudebantur is an Indicative extended over a construction originally, perhaps, confined to the 'Subjunctive': tantus erat timor omnium ut nemo ex urbe excederet is a 'Subjunctive' extended to express 'fact,' a meaning originally expressed by the 'Indicative': the same will apply to certain Tacitean constructions with donec, quanquam etc., and to Classical Latin constructions such as the Indirect question and the 'Subjunctive' with cum. In other words, the grammatical divisions which one makes must not be too hard and fast (cp. Principle VIII.). Any one case has, in some language or other, neutral grounds with every other case (if we exclude the Vocative): cp. difficile est dictu, where dictū may be an Ablative, Locative, or Instrumental, or two of them, or all three, in form ; and yet its present meaning is often that of a Nominative: e.g. difficile cst dictu quid fecerit $=$ 'saying what
 Accusative is in meaning practically a Nominative a $\dot{\delta} \epsilon \lambda \phi \in \grave{\rho}$, which might be substituted; 'I $\lambda$ íoo $\pi \tau o \lambda i \epsilon \theta \rho o{ }^{\prime}$ shows a Genitive with the meaning of a Nominative "I $\lambda \iota o \nu$ : in dulce est morī, morī is apparently Dative with the meaning of a Nominative. Such nentral ground uses are to a great extent the inevitable result of Principles I. and V. (Analogical Extension).

However, Mr Monro (p. 129) seems to think that the Accusative cannot have had any single original meaning (not because he has not yet found one out, though this would perhaps explain his conclusion most simply, but) because 'no single principle will explain all the uses and yet exclude all the relations expressed by all the other cases.' According to this objection, he ipso fucto condemns his own theory as to the origin of the Greek Dative, because in
 Ablatival Genitive (p. 147). The objection implies that if the Accusative had an original single meaning distinct from that of every other case, it could never, even by a development of
thousands of years, have extended by any Principles of development in language (e.g. Principles I. and Y.) over any single meaning of any other case, and that, conversely, no Principle of development in language could possibly have made any other case come to express the same meaning as the Accusative: for, according to what Mr Monro implies, if he does not actually express it, had a single analogical extension of this nature taken place, then, ipso facto, the Accusative would be proved to have never had a single original meaning.
VII. On supplying definite words: with calidu, magni, meat (interest), ívтєpaía and 'St Paul's' (and the list might be easily extended)-it is less incorrect to supply the words aqua, pretii, re, $i \mu \mu_{\rho} \rho a$, and Cathedral, becanse these words were once essential to the meaning. But in most constructions no definite word can be safely supplied, and the following formula is safer. 'The construction used was that which would have been used if a certain class of word had been actually expressed' -an actual word was not expressed because it was not needed, and would often have marred the rapidity or the passion or the spirit of the expression. In Latin especially the verb came at the end of a sentence, and the sense ought not to be complete before the last word has been spoken. Now in passionate exclamations the context, the tone of voice, and the gesture, and expression of face made the meaning quite clear before the verb was reached-and therefore there was no need to put in the verb.

1. The Accusative in Latin, and the 'Genitive' in Greek, in exclamations: e.g. O hominem impudentem! 闵 $\tau \hat{\omega} \nu \pi a \rho \nu o ́ \pi \omega \nu$ ! here originally the construction used was that which would have been used if a verb of emotion had been actually ex-pressed-it was not expressed becanse it would have been unnecessary or feeble: ер. оѝк є's ко́ракаs; where üтєє at the end would be inexpressibly feeble. The present meaning may be different, and some uses may have another origin.
2. 'Accusative and Infuitive' in Eaclamations: mene in-
 perhaps miror te capere miginally meant (in bahl English) 'I
wonder at you, viz. at (or about) your taking,' ${ }^{1}$ dico te capere 'I mention (?) you viz. about your taking,' ${ }^{1}$ iubeo te capere ' I give you an order about taking' $\rightarrow$ 'I wonder, or I say, that you take' and 'I command that you take,' or 'I wonder-at, or mention, your taking' and 'I command your taking': te was then, originally, the direct object of a transitive verb ${ }^{2}$, and capere a Locative of an explanatory nature-then te capere, without changing its form, changed its meaning (ep. Principle I.) and became equivalent to quod tu capis, ut tu capias, or tua(m) captio(nem). Hence, when this has been accomplished, te capere can be used withont a transitive verb to govern the te, e.g. iniquom est te capere, where te capere $=$ quod tucapis, ut tuc capias, or tua captio. In Exclamations, e.g. totā te ferri, Cynthia, Romā! ( $\bar{\epsilon} \mu \bar{\epsilon} \pi a \theta \epsilon i \nu \nu \tau \dot{\delta} \delta \epsilon$ ), the same construction was used which would have been used if a verb like irascor or a phrase like iniquom est had been actually expressed. Such verbs or phrases were not expressed, because the meaning was clear without them and they might have marred the passion. In Hoe verunst tota te ferri, Cynthia, Romā! (Propertius), hoe verumst comes first, and so does not mar the passion.
3. Te ut ulla res frungat! Here also when impero ut hoe facias 'I command as to how you are to do this' $\rightarrow$ 'I command that you (should) do this,' one could say iniquon or incredibile est ut hoe facias 'it is mnfair or incredible that you should do this': hence in te ut ulla res frangat! originally the same expression was used which woukd have been used if an expression tike iniquom or incredibile est hat been actually expressed. The present meaning may be different, however.

[^5]4. $\lambda \hat{v} \sigma o \nu$ and $\lambda \hat{v} \sigma a \iota$. Originally, apparently, $\lambda \hat{v} \sigma o \nu$ was an Accusative of the Object or Purpose, closely akin to the Accusative of motion to (v. under the Accusative and cp., in Latin, lusum it Maecenas), and $\lambda \hat{v} \sigma a \iota$ was a Dative; both meant, then, 'to or for a releasing' ( $\mathrm{cp} . \dot{a} \pi \hat{\eta} \lambda \theta \epsilon \lambda \hat{v} \sigma a \iota$ ), and $\lambda \hat{v} \sigma-o-\mu$ differed from $\lambda \hat{v} \sigma-a \iota$ in having an extra suffix o added to the Aorist-stem. Apparently at first the same construction was used which would have been used if a verb like 'go!' had been actually expressed: there was no more need to express it than there is with our Imperatival Datives or (?) Accusatives 'Home!' 'To heel!’ 'To the Criterion!' 'To work!' 'To bed, to bed, Sleepy-head!,' or with the Sanskrit Accusative of a verbal noun used with the meaning of an Imperative (e.g. āsyatām = 'sit down,' which is just like āsyatāin yāti 'he goes to sit down' or 'he sits down'). In Sanskrit the Dative of a verbal nom is sometimes found with the meaning of an Imperative, etc. A Latin parallel of a Dative used with the meaning of an Imperative would be legimine (v. Chapter II.), if it originally meant 'to or for a choosing,' (cp. nominī): we may also compare c̈va ' (rise) up.'
5. The Historic Infinitive: hostes fugere, Romani sequi 'the cuemy fly and the Romans pursue them' is the present meaning (approximately): originally perhaps the same construction was used which would have been used had sunt or eunt etc. been actually expressed. Whether there was any Locative meaning ('the enemy are engaged in flying'), or any Dative meaning ('the enemy are, or go, for pursuing'), ever present in similar constructions it would be hard to say. Perhaps fugere and sequi had already sometimes become equivalent to vague ideas like our 'a-flying' 'a-pursuing' before these constructions were used. For the non-expression of sunt etc. (partly because it spoilt the rapidity and terseness and vividness) cp. ventum Roman (= ventum est Romam), and the Sanskrit participle (frequently), e.g. d!stavantas = 'we have seen,' and our English 'Faded every violet, all the roses' (Temusson), and legimini (Inlicative) if $=\lambda \in$ ró $\mu \in \nu o r$.

## VIII. Categories of Uses:

Categories of uses have been described as 'nicknames of uses,' and as 'things which describe in the abstract what is already clear from the translation itself, and which belong to the province of translation rather than of Grammar': they are nevertheless indispensable, if their importance be not overrated.

The following points may be suggested:

1. Categories of meanings in themselves do not necessarily explain how a use has come about. If we say that Jones comes under the category of 'a human being,' we do not explain Jones. If a boy, after conscientionsly looking out a construction in a grammar, finds that it is 'a genitive of quality,' he learns nothing of the history of such a genitive, and as a rule finds that the book tells him what he knew already. He is often taught to regard this 'nickname' as reaching the extreme limit of human knowledge, and generally the result is that either he never thinks of enquiring further (this is a usual result), or that he thinks he understands all about the construction (this is the fatal result). It is seldom that too much attention to categories alone does anything to a boy's interest in grammar except to quench it.
2. Categories do not necessarily embrace every usage and every example: e.g. we find in no grammar 'a Cenitive of commemoration of victories won at,' such as épaai Hveíwv «ं $\boldsymbol{\gamma}^{\prime}{ }^{\prime} \boldsymbol{\nu} \omega \nu$ (Pindar) suggests :
3. They are not necessarily mutually exclusive: this is most important: a construction camot always be referred to one heading or 'nickname' alone: if there is any donbt, it is safer to refer it to two or more headings:
 'Quality' and of 'Material': and some might also call it 'Partitive' Genitive. There is no need to say, 'But it is more probably Cenitive of so-and-so,' for every sensible anthority has ahnost an equal right to maintain his own 'so-and-so,' and so the chances are that all are right, until one be proved wrong.
(b) tuetur se crmis: armis gives both the manner, and the means, and the instrument of the defence.
(c) 'Objective' and 'Subjective' Genitive: the instances where these two ideas meet, according to the different way in which one happens to paraphrase them, have already been illustrated (v. 'the Genitive' in Chapter II.).
(d) Internal and E.cternul Accusative: it has been nsually considered that the Accusative had no single meaning originally, unless, as is thought by some who despair of finding this meaning, it originally meant anything and everything, from introducing a second subject (Paul) to expressing any kind of adverbial force, e.g. manner. The orthodox view is that the Accusative had one form but two meanings, which are practically always to be distinguished, viz. 'Intemal' and 'Extemal' Accusatives: the External Accusative is the direct object of a transitive verb; the Internal Accusative 'repeats the notion already contained in the verb' (only the Latin verb generally is the last word in the sentence, and this Accusative must be very clever to repeat a thing before it has been said once ${ }^{1}$ ): there are many Accusatives which do not come under either hearling at all satisfactorily : these are a 'sort of Internal Accusatives'--it phrase which, like many abstract phrases, considers itself about as safe from criticism as it actually is safe from being muderstood by a schoolboy. The Internal and External Accusatives are illustrated thus: $\sigma \pi \sigma \nu \delta a ̀ s ~ \sigma \pi \epsilon ́ v \delta \epsilon \ell \nu$ is Iuternal Accusative, as $\sigma \pi o v \delta a ̀ s ~ ' r e p e a t s$ the idea already contained' in $\sigma \pi$ év $\delta \epsilon \ell \nu$-but
 which is therefore 'a kind of Internal Accusative,' or 'an Extension of the Cognate Accusative,' etc. Again, piŋa mor-
 also External. Which is it really? As a matter of fact, it seems that when e.g. $\mu$ iav vúкта єü $\delta \epsilon u$ approaches in meaning to 'to spend one night in sleep,' it resembles an $\Lambda$ ecusative of the Direct Object, when it approaches in meaning to 'sleep to the extent of one night' it is nearer to in 'advertial' Accusa-
 to either heading exclusively-and so we had better refer it to both (v. further 'the Aecusative').

[^6]4. They have not always one meaning only:
(a) 'Partitive' Genitive (cp. Principle XIII. :3).

Most Partitive Genitives have a certain bond of connexion, in generally admitting of being roughly paraphrased or translated by one of our Locative prepositions (c.g. in, among) or Ablative prepositions (e.g. from, out of). But some distinction must sometimes be made between
(1) those in which the governing substantive applies only to a part of the governed substantive, e.g. perhaps $\pi \hat{\omega} \mu a$ $\pi о т а \mu о \hat{v}$ in one of its senses of 'a drink of part of the river,' where 'drink' does not apply to the whole river (cp. é $\delta \omega \kappa \epsilon \tau \hat{\omega} \nu$ $\dot{\varepsilon} a v \tau o \hat{v}$ 'he gave some of his property,' $\notin \pi \epsilon \mu \psi \epsilon \tau \hat{\omega} \nu \Lambda v \delta \omega \bar{\omega}$ ' he sent some of the Lydians'), and
(2) those in which the governing substantive applies to the whole of the governed substantive-e.g. $\mu$ é $\rho o s ~ \tau o v ̂ ~ o ̈ \lambda o v, ~$ not 'a part of a part of the whole,' like (1), but 'a part of the whole whole.' (Cp. $\epsilon \in \delta \omega \kappa \epsilon \tau \omega \hat{\nu} \nu \dot{\epsilon} a v \tau o \hat{u}$ 'he gave all his property.') But both (1) and (2) meet in English $\left.\begin{array}{l}\text { a drink } \\ \text { a part }\end{array}\right\}$ in or from $\left\{\begin{array}{l}\text { the river } \\ \text { the whole }\end{array}\right.$ and also are often indistinguishable in the negative 'he did not drink some of the river' and 'he did not drink any of the river.'

Perhaps it is this which has made many confuse the two classes: but (1) is a comparatively small class, (2) a comparatively large class. Grimm endcavoured to explain the Accusative with verbs as denoting a complete mastery of the object (e.g. $\lambda a \gamma \chi \chi^{i} \nu \omega$ đò $\left.\kappa \lambda \bar{\eta} \rho o \nu\right)$, and the hosts of Genitives with verbs as denoting an incomplete and partial mastery of the object, corresponding to the small class (1) of Genitives with substantives (e.g. $\lambda a \gamma \chi$ áv $\omega$ тồ $\kappa \lambda \dot{\eta} \rho o v$ ). One objection is that if this meaning underlies all Genitives with verbs, it would also underlic the majority of Genitives with substantives, i.e. common Genitives to the analogy of which the Genitives with verbs are largely due: whereas we see that class (1) is a small one with substantives, and class (2) is a different kind of Genitive, and does not denote partial mastery of the object, and so must be left out of the question, even if it has the same name
'Partitive'.' This mistake of Grimm's will illustrate one disarlvantage of too much attention to mere categories.

Here the identity of the names of the two kinds of Genitives has been the cause of the error.
(b) Predicative Dative :
(1) The Latin Predicative Dative originally differel from other Datives (e.g. of the purpose, etc.) only in being the singular Dative of an abstract or semi-abstract noun, going typically with the verb 'be'; est voluptati originally, perhaps, meant something like 'it is a potential pleasure,' often implying and later on coming to express that 'it is an actual pleasure': just as when we say 'I have hat an enjoyable day,' we no longer mean 'a day that might have been enjoyed,' but 'a day that has been enjoyed': Greek only presents a parallel in the
 Dative. The possible influence of the negative non est voluptati 'it is not a possible source of pleasure' $\rightarrow$ ' it is not an actual pleasure' on est voluptati $=$ 'it is an actual pleasure' has not occurred to Roby: cp. Principle X. 2 and 3.
(2) $\tau 0 \hat{\tau} \tau o ́ \mu \circ \iota \beta o v \lambda o \mu \in ́ \nu \omega \dot{\in} \sigma \tau \iota$ shows an altogether different 'Dative,' where possibly the 'Dative' (of the possessor or person with reference to whom) might be paraphrased-e.g. $\dot{\epsilon} \sigma \tau i \mu o \iota$ тồтo by ê $\chi \omega$ тои̂тo-then $\beta$ ou入oнéveć would, with é $\chi \omega$, become $\beta o v \lambda o ́ \mu e \nu o s$, and we may almost compare тồto $\pi \rho \kappa$ ísas é $\chi \omega$. The word 'Predicative' is used for both, and has led King and Cookson to confuse the Greek and Latin constructions. The Greek is called 'Predicative' not because the Dative of an abstract noun is equivalent to a Predicative Nominative, but because the Dative of a participle, agreeing with a Dative (of Possessor, etc.) practically expresses in itself the main predication, and is perhaps égual, logically, to a finite verb, e.g. ßoúлодая.

[^7]
## (c) 'The Double Accusative':

As a matter of fact, although many have tried to discuss 'the origin' as if there were ouly one origin, any two Accusatives combined with a single verb etc. deserve this name, strictly speaking: it will be seen under 'the Accusative' that even with a very limited interpretation there are several kinds.
(d) 'Quality' or 'Description' may be simply a quality, but it may also be the material, which is frequently regarded in the light of a quality: ep. 'a man with a long nose ' ('quality') and 'a table of wool' (quality and material).
5. Categories are often misleading:
(u) They lead us to regard as separate, and as to be altogether distinguished, constructions which overlap, and which really are all connected together, more or less closely, by some unity which occasionally analogy etc. has obscmred. With the Accusative the effect of hard and fast classifications (which are all clifferent in different grammars) has had a fatal effect in obscuring a possible original unity of meaning.
(b) They so often depend on the instinct and taste of the individual, rather than on any principle of language, or any real distinction existing in the speaker's mind when he usel the constructions, that there is little likelihood of any two grammars always producing the same result: as they are used to-day, they admit of no final criterion of correctness for the schoul-boy: his master, lis grammar, the annotator of his book, and last, but not least, his own self, frequently arrive at different conclusions, and so, if he does not give up grammar, he at least ceases to think for himself, and 'learns by heart.'
(c) They lead us to see distinctions where the real distinction between two constructions (e.g. עvктós and $\nu \cup \kappa \tau i)$ is almost entirely that of relative frepnency of use, and not that of meaning.

Still, they are probably indispensable, and valuable, if made with the elear understanding that-to sum up-

1. They do not account for uses, i.c. for how they have arisen, but are nicknames of uses which we find existing.
2. They do not necessarily include every instance.
3. They are not necessarily mutnally exclusive.
4. They do not necessarily express only one meaning.
5. 'They depend largely on the taste of individuals, rather than on any real distinction in the speaker's mind which we can be sure of.
IX. The connexion between Greek and Latin is close : they both had the same fomdations and materials, and differed rather in the extent to which they developed any construction. To call a Latin construction a gruecism is not enough : it must have been formed on the model of constructions already existing in Latin: e.g. proficiscitur cognoscendae antiquitatis (Tacitus) is called an imitation of the Greeks $\dot{\iota} \pi \tilde{\eta} \lambda \theta \epsilon$ тồ $\gamma \nu \omega \hat{v} a \_$-but this construction has a Latin model, bellum abolendae infamiae, where abolendae infamiae defines bellum 'war for the sake of doing away with the disgrace': hence bellum facit, or pugnat abolendae infamiae: one can rarely say that in any construction Latin influence ends and Greek begins: Greek rather brings out a latent capacity in Latin than creates an entirely new departure.
'Thus, taken as a whole, 'Graecisms' are not constructions alien to Latin, and constructions to which Latin took a bold leap, but constructions for which Latin had a latent capacity, and to which it crept by short and almost imperceptible stages. If one may use an illustration, they are not like Greeks in Latin clothes, but rather more like what Latins in Latin clothes would have become after staying for some time in Greece. Of course some Latins who had been longest in Greece would become very like Greeks in appearance, but there would generally be other Latins in varying stages of development.

We must suppose that since, as at rule, the 'Graccism' was intelligible to a Latin, it was, at the most, an analogical extension from intelligible constructions which already existed in Latin. It is therefore not an adequate explanation of a Latin construction to simply say that it is a Graecism; one must atso try to show the Latin constructions of which it is an extension.

## X. Implication :

A construction may originally express one thing and imply another: later on it may come to actually express the second meaning and no longer merely to imply it:

1. sunt qui viderint (v. Principle V. A. 3) in early times expressed 'there are people who (will or would or) can have seen' $\rightarrow$ 'there are people who have actually seen' by means of the negative construction.
2. 'enjoyable' originally expressed 'able to be enjoyed' $\rightarrow$ (sometimes) 'actually enjoyed'-this is partly throngh the negative 'not able to be enjoyed' implying 'not actually enjoyed,' and partly from the past uses; one does not usiably say that a thing is able to be enjoyed unless it actually has been enjoyed (v. Principle V. A. :3).
3. Predicative Dative: est voluptati (cp. Principle VIII. 4 (b) and the Sanskrit Dative) originally was a Dative of Purpose etc., 'it can be a pleasure' $\rightarrow$ 'it actually is a pleasure,' partly through the negative 'it cannot be a pleasure' implying 'it is not a pleasure,' and partly from the past (cp. decemviri legibus seribundis 'decemvirs serving the purpose of writing down the laws' $\rightarrow$ 'decemvirs who did draw up the constitution').
4. tentus evat timor omnium ut nemo ex wrbe excederet, in early times e.g. 'so great was the fear of all that no one would (naturally) have left the city' $\rightarrow$ 'that no one actually left the eity'; this is partly through the negative, for 'that no one could leave the city' implies 'that no one did leave the eity,' and also through the past idea: one would not ordinarily say that the fear was great enough to prevent their leaving unless one knew that it aetually did prevent their leaving: ep.
5. ${ }^{\omega} \sigma \sigma \tau \epsilon$ and the 'Infinitice'- $\omega$ '̈ $\sigma \tau$ was in early times an Ablative of the 'Relative' meaning $\rightarrow$ 'in which maner' ' by which means' (v. under the Ablative ease): apparently it was not the $\tau \epsilon$ which meant 'and' (cp. Latin que), but the $\tau \epsilon$ which generalised or added no meaning at all (cp. Latin quisque
 тoṽo 'he did it in a way which tended to prevent this' (or 'by which he purposed to do so') $\rightarrow$ 'he did it in such a way
that he actually prevented this': this again (?) is partly through the negative. Then, when $\ddot{\omega}^{\prime \prime} \sigma \tau \epsilon \epsilon \epsilon \rho \rho \gamma \epsilon \iota \nu \tau o u ̂ \tau o \rightarrow$ 'so that he actually prevented this' (= $\omega \sigma \tau \epsilon \epsilon \hat{i} \rho \xi \epsilon$ тô̂̃o 'so that he actually prevented this'), Greeks sometimes used $\omega^{\prime} \sigma \tau \epsilon$ oùк $\epsilon i \grave{\rho} \gamma \epsilon \iota \nu$ тои̃тo meaning $\ddot{\omega} \sigma \tau \epsilon$ ойк єîp $\rho \in$ то仑̂̃o: v. further under the Infinitive for another origin.
6. Imperfect of an uttempted act in Greek and Latin: in early times there was in the past an Aorist 'he did it,' which apparently sometimes, in certain contexts, had the Progressive meaning 'he was engaged in doing it' (cp. 'he did it last summer' and 'he was doing it last summer')-the Aorist denoted an act as a complete whole, the 'Progressive' an act as in progress: the Aorist denoted a complete act 'he did it' and hence the 'Progressive,' by contrast, an act not completed, or an act still in progress-hence an act begin or attempted but not completed. The idea of the attempt not succeeding originally came from the context. If we are told by Thucydides that Cleon
 etc. which tells us that the meaning is 'he was engaged in backing out of his words (mnsuccessfully).' Again if Philoctetes (Sophocles, 2.52) ean say 'Thou hast not heard any report of the miseries with which I $\delta \omega \omega \lambda \lambda \dot{\mu} \mu \eta \nu$,' the mere fact of his speaking proves him to be not yet dead, and gives the Imperfect the force of ' I was perishing (but did not actually perish).'
7. (Cp. Principle I. 1):
$\mu \grave{\eta}$ è $\lambda \theta \eta$, originally expressing 'let him not come,' implied and later on came to express the possibility of his coming: od denied this possibility, and $\delta$ éoocka expressed 'I fear this possi-
 'it may possibly be rather boorish to speak the truth' almost expressed, thanks to the well-known eipoveía, what others with more bluntness would have expressed by 'it certainly is so.'
8. ov̉ $\pi$ ádu was apparently like our 'not altugether,' which originally expressed ' not perfeetly,' but later on, themks to the tone and emphasis, can come to practically express what it originally only implies, viz, 'not at all.' This expression might have originally been used by the Greeks because it was more refined and polite.
 tainly (as a rule) practically expressed 'he did not do it,' but such an idea must have come mainly by implication, and by contrast with and differentiation from the form without d̈v, which never expressed this meaning. Of course originally the implication must have come chiefly from knowledge external to the sentence itself. $\epsilon i \in \pi \sigma$ ' $\neq \sigma \in \nu$ did not in itself express ' he
 it' is not expressed), neither did jंסiкп $\sigma \in \nu$ äv do this in itself
 wrong,' where 'he did not do it' is not expressed) (v. further under the Aorist and Imperfect Indicative).
 meaning 'he began to reign,' 'he fell ill,' ' he came into possession.' Originally these words simply expressed a fact 'he was king,' 'he was ill,' 'he had possession': but often, especially if we do not hear of the man being ill, or being king, or being in possession before a certain day, and if we hear of his being ill, or being king, or being in possession after this day, the natural implication is that he begen to do these things on this day.
9. тís oűk oîסє; quis nescit? originally, like so many Rhetorical questions, asked for information, but ultimately expresses, practically, a statement 'everyone knows.'
10. $\phi \eta \mu i \quad \sigma \epsilon$ imiévaı, and dico te ubire (cp. Principle VII. 2), if modelled on кє $\bar{\epsilon} \dot{v} \omega$ $\sigma \notin$ cimı'́vaı and inbeo te abire, at first had an abstract meaning like 'I mention your departure,' sometimes implying what later on they came to actually express, 'I say that you are going away.'
11. EIOOIEI and EDOIHさE on Statues etc. The usual explanation is that EHOHIISE meant ' $\Lambda$ made this Statue' whereas EIIOJEI called attention to the labour spent on the task. Now besides the objection that no one conld think of writing on a picture ' $A$ spent a great deal of trouble over this -it may be bad, but it has taken a long time,' there is mother objection, viz. that EHOIHIE would probably, by contrast, have come to express 'A did not spend labour on the task.' The meanings of є́viка 'he is or was the victor' (ср. єккри́тєь), Є'тєктє 'she is or was the mother,' joíкєє 'he is or was an
offender against justice,' $\kappa a \theta \epsilon v$ ' $\delta \omega \nu$ (not 'while he was sleeping' but) 'while he was a sleeper,' etc. etc., point to EПOIEI as
 was the maker': the Greeks often preferred to express a person as 'doing' something rather than as 'being' something, cp. $\beta a \sigma i \lambda \epsilon v \in \epsilon$ 'he is king.' Any tense distinction between ' A male this' and 'A was the maker,' would disappear where the emphasis fell so strongly on the person (A) that the verb ('made this' or 'was the maker') might almost have been omitted.

In conclusion, then, it is possible that a certain construction which originatly expressed one meaning may, thanks to the context, the tone, and the erpression of face, and to developments in negutive sentences, etc., imply and later on (by constant association) come to often actually express some secondary meaning.

## XI. Changes of time came as a rule through the abstract and were helped out by the context:

 shall come'), he will see' $\rightarrow$ 'granting his coming he will sce':
 sees,' i.e. 'whenever he comes he sces' (cp. Principle I. 7 and v. under the Subjunctive and Optative).
2. $\epsilon i$ è̀ $̀ \theta$ Oot, ídoı àv 'if he shall come he will see' $\rightarrow$ 'granting or supposing his coming he will see': hence $\epsilon i$ én $\lambda$ Oou $\epsilon i \delta \epsilon \nu\left(a^{\prime} \nu\right)=$ 'granting or supposing his coming he saw,' i.e. 'whenever he came he saw' (c). Principle I. 11 and v. under the Subjunctive and Optative).
3. $\quad i \pi \omega \lambda{ }_{0} \mu \eta \nu \epsilon$ ध' $\mu \in \lambda \epsilon i ́ \psi \in \iota s$ means ' $I$ an done for (cp. Latin perii si me adspexerit) if you (shall) leave' me- $\dot{i} \pi \omega \lambda o{ }^{\prime} \mu \eta \nu$ originatly meant 'I perished' $\rightarrow$ 'my perishing is a fact': hence, if the context makes it clear, 'my perishing is a fisture fact.'
4. $\quad \ddot{\pi} \epsilon \epsilon \mu \iota$ originally meant 'my going away is a fact,' or it simply comnected 'me' with the idea of 'going away' 'my going away is a future fact' (the idea of futurity coming from the context): cp. 'The other said "I go" "and went not' this explains the Deliberative Indicutive $\pi$ ô̂ $\phi \in \hat{y} \gamma o \mu \epsilon \nu$; and gro
fugimus?-they are extensions from $\phi \in \dot{\gamma} \gamma o \mu \in \nu$ and fugimns, meaning 'our flying is a fact,' hence 'our flying is a future fact,' if the context made this clear: cp. (Horace)

## sed bellicosis fata Quiritibus

hac lege dico, ne niminm pii...
tecta velint reparare Troiac,
where dico practically $=$ dicam, becanse into the idea of ' $m y$ telling is a fact' the idea of 'a future fact' is infused by the context (ne...velint).

A grod instance is quem metui morituru? (Vergil) meaning 'whom was I to fear as I was going to die?'-metui meant 'my fearing was a fact' or connected 'me' with the idea of 'fearing in the past': the context (moritura ete.) shows that at that past time alluded to the 'fearing' was future.
5. rogavi quid fucerem, ŋो рó $\eta \eta$ vi $\pi о \iota o i ̂ \mu \iota$ : originally ' I asked what I was to do,' sometimes $\rightarrow$ 'I asked abont my course of action,' which sometimes, again, $\rightarrow$ 'I asked what I was doing in the past'-if the context made this meaning clear :
6. ơouaı тotє $\hat{\imath}$ ', originally ' I have an idea abont the doing' $\rightarrow$ ' I think I am doing it,' 'I think I was doing it' (especially, if тóтє etc. were put in as a kind of augment), or 'I think I shall do it'-later on, the Aorist generally denoted past time ( $\pi o \imath \eta \sigma a \iota$ ) and the 'Future' ( $\pi o \iota \eta \sigma \epsilon \iota \nu)$ future time,
 єن̇тv $\begin{aligned} & \hat{\eta} \sigma a \iota ~ \\ & \text { ' ' I think }\end{aligned}$ been successful,' from the abstract 'I have an idea about (my) succeeding, or success': cp. 'he asked about the journey,' which could (according to the context) mean a present, past, or future journey.
7. si revenit reddam: English ${ }^{1}$ 'if he returns I will
${ }^{1}$ Those Grammarians (and they are too numerous) who call the many English idioms of this nature 'loose inaccuracies,' ete., are on the wrong tack: the development from 'if he does this' to 'if his doing this is a fact' and hence, in certain contexts (e.g. 'if he does this he will die'), to 'if his doing this is a future fact,' is as perfectly natural as one could wish: similar explanations apply to 'I would come if I had time,' ' he would have come when he save you,' 'they will respect him when they see him,' 'if the Lord himself had not been on our side they had swallowed us up quick,' etc., etc. It is really a loose inaccuracy to call a prevailing construction a loose inaccuraey!
restore ' has the same idiom: 'he returns' is future to, and not contemporaneous with, the time of speaking: this is through the abstract 'if his returning is a fact.'
8. trudebantur..ni..incasisset (Tacitus): 'they were being thrust $\rightarrow$ 'their being thrust was a fact or certainty,' which $\rightarrow$ 'their being thrust would have been a fact' owing to the context 'if something had not happened.'

There are other explanations of changes of time: (11) is Roby's:
(11) 'that the present moment is on the borderland of past and future and so can easily step into either teritory' : this somuds right in the abstract, but in the concrete it means that ' I am doing this at the present moment' can easily step into the past 'I did this' (e.g. 30 years ago) or into the future 'I will do this' (e.g. 30 years hence): moreover this only explains the present meaning a future or past-not $\dot{a} \pi \omega \lambda{ }^{\prime} \mu \eta \nu$.
(b) 'that the future or the pust is vividly culled to the present, in the same way that a picture of a past or future scene presents that scene as if it were actually going on before our eyes': this suits some instances, especially the narrative present, and cp. perhaps English 'says he' = 'said he': but it cannot always be used as an explanation and does not explain $\grave{\iota} \pi \omega \lambda o ́ \mu \eta \nu$.

## Changes of voice also come from the abstract, as a rule :

In French we get a development through the Reflexive: e.g. il se casse 'it breaks itself' is mot son near a translation as 'it is broken.'
9. amubilis means 'suitable for loving others' or 'suitable to be loved by others'-this comes from the abstract, which can be paraphrased by "admitting of, or suitable for, loving of love.' Cp. English 'pitiful,' 'fearful ':
10. aptus sequē, and uptus capī originally meant 'suitable for following' and 'suitable for taking': the first $\rightarrow$ the Active 'suitable for following others,' the secoul -the Passive 'suitable for being taken' (v. further under the 'Infinitive').
11. aï $\sigma \eta \eta \iota \iota$ è $\chi \in \iota$ (cp. Aristntle) originally meant (in bald English) 'it has or admits of perceiving' $\rightarrow(\lambda u ́ \pi \eta)$ alo $\sigma \theta \eta-$ $\sigma \iota \nu$ é $\chi \in \iota$ '(pain) is or can be felt,' and also $\rightarrow$ ( $\nu o \hat{\varsigma}$ ) ai้ $\sigma \theta \eta \sigma \iota \nu$ é $\chi \in \epsilon$ ' (the mind) feels or can feel.'
12. English ' I hang (the picture),' 'I ring (the bell)' seem to show that the verbs 'hang ' and 'ring' were originally Active: they may $\rightarrow$ the Passive '(the picture) hangs' and '(the bell) rings' through the abstract 'has or is comnected with hanging or ringing ': cp. the Greek Active form $\lambda \epsilon \in \gamma \epsilon \iota=$ ' thou art said.'
13. dederut comam diffundere, in carly language 'she had given her locks for a scattering about,' might develope into the Passive 'to be scattered about' (perhaps in a context like ventis), (1) into the Active 'to scatter things about' in a context like 'wine-glasses on the table': the same applies to Creek éoooav [тóton, тוvà oiкєì ' they gave a place to be dwelt in, or inha-
 some people to dwell' (Active).
14. the Middle (q. v.) was either originally the same as the Active in meaning, or else had an abstract force like 'I have or am connected with a striking,' or 'I have or am connected with a blow' $\rightarrow$ ' I strike (others)' or 'I am struck (by others).'
1.5. the Gerumdive (q.v.) had originally an abstract force: agendus 'connected with doing' [ $\pi 0$ o $\eta \tau o ́ s] \rightarrow$ meaning, according to the context, 'doing' (ep. (?) volvendis mensibus), Active, or ' being done' (cp. (?) cupidus huins rei agendae), or 'to be done' (cp. haee res est milhi agenda 'this thing is for me connected with doing' $\rightarrow$ 'this thing has to be done by me').
16. The Perticiple in -tus in Latin was originally abstract (cp. maturato opus est ' there is need of a hastening'), and it meant, also, 'connected with doing,' but came to be mostly confined to past time: it sometimes $\rightarrow$ Active pransus 'having dined,' usus 'having used,' hut generally $\rightarrow$ the Passive actus 'having been done': ep. the Greek $\tau \lambda \eta \tau$ ós 'enduring' and ä́ $\tau \lambda \eta \pi o s$ ' not to be endured.'

[^8]17. In certain kinds of English we find ' 1 -rgoing' meaning 'going' (Active), but we also find 'the ark was a preparing' meaning ' was being prepared' (Passive).
18. The development of the Reflexive from the Abstract is quite easy: if we say ' he had a bath,' 'he had a shave ' (?), 'he had a feed' the natural conclusion generally is that he bathed himself, shaved himself, or fed himself, muless anything tells us that such was not the case. The same will also apply to the Greek and Latin Reflexive (v. further under the Voices).
19. ferendum, the nenter of the Adjective ferendus -a -um (v. above 14), and used as an abstract verbal noun, meant 'a carrying ': it could develope into the Active or Passive according to the context; e.g. utilis ad ferendum 'useful for carrying' would be Active when it applied to an omnibus and Passive when it applied to a walking-stick.
XII. Constructions (especially in Homer and Plautus) which fuirly admit of both the old and the new meaning, may be classed as possible transition usages:
(1) $o$ ктeípas: originally the Aorist was timeless, and derived any idea of time from the context: in the Greek Indicative the angment acted as the context to denote a sign-post of past time: the original meaning of the Participle would be 'the slayer'-cp. $\delta \delta o u \lambda \omega \sigma$ 'í $\epsilon \boldsymbol{\nu}$ os 'the enslaver'-this $\rightarrow$ 'the man who did slay in the past' in a context like $\dot{a} \pi \epsilon \in \operatorname{ta\nu \epsilon \nu }$ : ó $\kappa \tau \epsilon i v a s ~ h e r e ~ c a n ~ b e ~ p u t ~ d o w n ~ t o ~ a ~ t r a n s i t i o n ~ s t a g e, ~ b e t w e e n ~$ 'the slayer' (abstract) and 'the man who slew ' (past): cp.
 'first answer me and then do me a favour'’, ë̀ate $\pi o \iota i \sigma \sigma a s$ or $\lambda a \theta \grave{\omega} \nu$ є̇ $\pi o i n \sigma \epsilon$ 'he was not observed in doing it' or 'he did it without being observed': these instances show that the Aorist was originally timeless and abstract-тồтo $\pi o \circ \eta \dot{\eta} a s \grave{¿} \pi \tilde{\eta} \lambda \theta \epsilon$ shows how the Aorist can now often express past time. A transition stage between the old timeless use and the use to express
 of the occurrence of this event' of 'I know that this event took place in the past.?
M. 'T.
(2) The Homeric Article was originally apparently a de-
 ' and she, viz. the woman, went with them'; this seems to show one old sense of the article: whereas aùtà é étєt $\theta^{\prime}$ ó $\gamma \epsilon \in \rho \omega \nu$ can be more safely referred to a transition stage between 'then he, viz. the old man,' and 'then the old man.'
 (v. under Chapter II.) : Leaf and most others print this with a semicolon after $\lambda \dot{v} \sigma \omega$, giving it the old meaning ' I will not release here: old age shall come upon her first'-others say that $\pi \rho i \nu$ is here a conjunction as much as 'in order that,' and that we have here one sentence and not two. It is safer to call this possibly a transition stage, with a meaning between the old and the new.
(b) The same may be said of ou $\pi \rho i ̀ \nu \kappa a \tau a \delta v \sigma o ́ \mu \epsilon \theta a \pi \rho i ̀$
 meaning 'we will not go down first: first the day of doom must come,' and the new meaning ' we will not go down (first) before it come' seem to us equally admissible: especially if we suppose the first $\pi \rho i \nu$ or $\pi \rho o ́ \tau \epsilon \rho o \nu$ or $\pi \omega$ etc., to have been at one time usually essential to the meaning: v. Il. 18. 134, and

 xpóvos) (for it does not seem natural to begin with a plain denial 'we shall not go down' if the practical meaning is 'we shall go down-but not till...': however natural it may seem to say: 'I won't go: I'll be hanged first,' if the practical meaning is 'I won't go at all'): then, when once the meaning had, by constant usage, become clear without the first $\pi \rho i v$, ete., its form could still be retained, but its formal expression does not necessarily prove that a paratactic meaning was still the only one (cp. $\delta$ é in the apodusis, which is liable to misinterpretation if we do not realise Principle I.).
 24. 551 . Here it is possible to see an original paratactic meaning (though, perhaps, the objection given in (b) suggests that the expression of the first $\pi \rho i \nu$, ete., had now become menecessary, and that therefore the meaning of $\pi \rho i \nu$ had already at
least approximated to 'until'): but, beside the paratactic ' nor wilt thou raise him (yet) ; thou art first to suffer ill hesides' it is impossible to exclude the hypotactic ' nor wilt thou....until,' and we may perlups call this a possible transition usage.

Such a method seems to avoid dogmatism and absolutism where they are ont of place, and to give some concrete explanation of the history of such constructions, and may be found useful especially in Homer, where we seem to often have the old, transitional, and new construction side by side (v. e.g. the uses of 'Prepositions,' 'Conjunctions,' 'Relative pronouns,' etc.). We camot gange "Homer's" exact feeling so precisely as to say that each construction is certainly old only, or new only; and, besides this, if the old became the new, it probably did not become so except by gradual stages, and an absolute division into 'old' and 'new' practically denies the present existence of any intermediate use.

## XIII. The meaning conveyed by a case or mood etc. must often be distinguished from the meaning conveyed by the governing word:

1. eyeo medecinà: $\delta \in \hat{\imath}$ нo九 tô̂ iatpô̂: always called Ablative of separation: the idea of separation or want lies in the egeo and not in medecina ; the case therefore does not express separation as its present meaning but perhaps 'that in respect of which' the want is felt or medecin $\bar{a}=$ medecinam.
2. si valet bene est, єí тои̂то то七є̂ $\mathfrak{i} \delta \iota \kappa \epsilon \hat{\imath}$ : valet is usually called an Indicative of supposition: but valet really expresses a fact, and si a supposition.
3. Some 'Partitive' Genitives (v. Principle VIII. 4 (a)): $\mu$ épos tô ö ô $\lambda o v$, purs Itclicue: the idea of part lies not in the Genitive but in the goveming word $\mu$ épos-the Genitive here is perbaps of the same kind as in 'double of the whole' (contrast $\pi \hat{\omega} \mu a \operatorname{\pi o\tau } \alpha \mu o \hat{v}$ 'a drink of a part of the river'), 'a
 share of the whole money,' $\sigma v \mu \mu \epsilon \tau i \sigma \chi \omega \tau \eta \varsigma$ aicias 'I have a share of the whole blame.' крат $\hat{\theta} \sigma o \hat{v}$ is called (quasi-partitive to mean 'I have a partial victory over you' as opposed to $\nu \kappa \hat{\omega} \sigma \epsilon \in$ 'I have a complete victory over you'-so крat $\sigma$ ' $\sigma \hat{v}$
' I have the victory over a part of you' would correspond to the small class $\pi \hat{\omega} \mu a$ mota $\mu o \hat{v}$ 'a drink of part of the river'according to this view (as I have already pointed out under VIII. 4 (ct)) the large class of Genitives with verbs has a tiny class of Genitives with Substantives corresponding to it. Grammarians have mixed up the two classes $\mu$ épos tov̂ öخou and $\pi \hat{\omega} \mu a \pi$ тотано仑̂ into one class, under one name 'Partitive,' and then they have applied this name to Genitives with verbs. The objections to Grimm's theory are, then:
(a) The 'partitive' meaning generally makes nonsense:
 Kи́к $\lambda \omega \pi о \varsigma \kappa є \chi$ о́ $\lambda \omega \tau a \iota$.

 from $\epsilon \not \rho \omega \varsigma \pi \lambda o u ́ \tau o v$.
(c) The class of partitive Genitives with Substantives is small, and so with verbs it would be necessarily small also.
4. 'Dutivus Commodi et Incommodi': very many grammarians put under this heading instances where the idea of benefiting or injuring either lies in the governing word (e.g. 'help' 'resist' 'frienlly' 'hostile') or was not present in the speaker's mind at all, i.e. instances where the Dative had no idea of benefit or injury but simply expressed the person or thing affected by an action: e.g. (i) quid facies huic? is classed under this heading by Kennedy, and also (b) the Dative of the Possessor with est, where the writer really spoke of a person as ( $(t)$ acted upon and as (b) possessing, without stating the 'action upon him' or the 'possession' to be for his interest or the reverse.
5. Goodwin (p. 142) calls the tense in $\epsilon \check{\imath}$ т $\tau \varsigma$ тoútov $\pi i o \iota$ à' $\quad$ ย $\nu \nu \eta \sigma \kappa \nu$ a tense expressing ' $a$ customury or repeuted uction': if he has any reason for saying this, it is that the general sense seems to imply that 'this' might have been freruently 'drunk

> ' whoever?
of.' But surely in 'if any one $\int$ drank of this, he died ' there conld be no idea of 'whoever drank of this repeatedly or habitually died'; apply the case to a man A.--'A. drank of
this': the apolosis will be ' A . then died' not ' A . frequently died.' The Imperfect and Aorist found here probably expressed simply a fact which resulted whenever the protasis was fulfilled, i.e. when any one drank of this, it was a fact or consequence that he died. Repetition is expressly avoided by such conditional sentences: if I say 'whenever you did it you did wrong,' whatever I imply I do not state that you frequently did wrong, for suppose you say 'I did it once'--then the apodosis is not ' you frequently did wrong,' lut (granting your doing it once) ' you did wrong once.' Goodwin misses half the point of the general condition by saying that the tense definitely states what really the whole sentence even does not go beyond implying.
6. In te ut ulla res frangut! the 'Subjunctive' does not express indignation, etc. by itself, any more than in $\epsilon i$ yà $\rho$ ë $\lambda$ Hoc the Optative expresses a wish by itself: the indignation probably lay in the tone and in the 'aposiopesis' originally, in 'O that anything should erush you (is terrible),' '() if he shouk come (I should rejoice)'; for the non-expression of the words in brackets v. Principle VII.
 (Goodwin, p. 3), or ${ }^{\circ} \pi \pi \omega$ s and the Subjunctive, which expresses 'purpose'?
8. It is very frequently stated (by practically every Crammarian, in fact) that when a 'l'reposition' governs a case, then that ease expresses generally the meaning which the 'preposition' expresses. To take instances, in constructions like ab
 $\epsilon i \varsigma ~ \tau \grave{\nu} \nu \pi o ́ \lambda \iota \nu$, oppidō and $\pi o ́ \lambda \epsilon \omega s$ are said to ahways express 'place from which,' urbe and $\pi o$ ó $\lambda \epsilon \iota$ 'place where,' and urbem and $\pi o ́ \lambda \iota \nu$ 'place to which': is this so, at any rate in most of the instances? is not the case-relation expressed by these words quite different to what it once was? This is really a most important question in the Syntax of the Cases, and I suggest this view as to the present meanings: ab oppido (imò and $\epsilon \in \tau \hat{\eta} \varsigma \pi o ́ \lambda \epsilon \omega \varsigma$ ) are nearly logically equivalent to the old construction of the simple Ablatives of the stems of these two
words (cp. e.g. Sanskrit case-uses): i.e. in ab oppidn, ab shows the relation of the idea of 'town' to some other worl or words in the sentence, just as in oppidod the od (roughly speaking) once showed the relation of 'town' to some other word or words in the sentence. This ean seareely be denied. To say then that, in ab-oppidत, oppidō itself always expresses 'place from which' is akin to saying that, in oppidod (oppido + od), oppidŏ always expressed 'place from which.' Surely in most instances the case-meuning of 'place from which' has left the case-ending and the stem and now is expressed by the 'preposition' and by that alone: the stem and ease-ending have, as a rule, no more definite meaning of 'place whence' here than the pure stem once liad without its Ablative ending -od.

I should suggest that in perhaps the majority of the Classical instances (including most of those above) the caseendings did not, in themselves, express any longer the same meanings which the 'prepositions' express: the case-endings often have about as definite a meaning in themselves as la ville would have with 'prepositions' like de, dans, and in, ete.


#### Abstract

XIV. Because two forms are different it does not follow, ipso factc, that their meanings are always different, or even that their meanings are sometimes different. Some grammarians start with the notion that different forms must necessarily have different meanings, and, on the strength of some few instances in which a difference of meaning is or seems to be present, formulate a hard and fast rule as to when one construction should be used, and when the other should be used.

The Greeks often 'clesired some new thing' even within the limits of a single sentence. Again; time throughout which, within which, and at which, are more or less distinct in positive sentences, but in a negative sentence (e.g. 'throughont, within, the night, or at night, she does not sleep') the (listinetion often disappears: again, what is the case-distinction between $\pi \epsilon \rho \iota \tau \epsilon \lambda \lambda о \mu \epsilon ́ \nu a \iota s$ ढ̈paıs and $\pi \epsilon \rho \iota \pi \lambda о \mu \epsilon ́ \nu \omega \nu$ є̇vıav́т $\omega \nu$ ?  between egeo medecinam, medecina , and medecinae, between


potior regni and potior regnō? This list might be easily extended.

It must be borne in mind that new constructions are not always created to fill a gap, and to express a meaning not already expressed by any form : often we have a natural and clear construction to express a certain thing (e.g. in Sanskrit, the Ablative with words like 'separated'), and yet another construction is made because people could not help making it-it was such a natural analogical extension-(e.g., in Sanskrit, the Instrumental with words like 'separated,' on the aualogy of the Instrumental with words like 'united').

One principle underlying syncretistic or compound parts of speech is not so much that a certain idea (once expressed by a certain form) ceased to require to be expressed, as that some other form came to express that idea; and so the first form ultimately often died out, or became 'contaminated' with the second form, etc.

## ADDENDA.

A. Addendum to Principle IV (Logical and Formal Grammar):

1. Some uses of $\mu \boldsymbol{\eta}$ in Greek (cp. IV. I b).
 (Herodotus) was perhaps due to ${ }_{\epsilon}^{\epsilon} \kappa \rho \iota \nu \epsilon \mu \bar{\eta}$ єivar being originally logically equivalent to 'he stated in reply the fact of...not being' (cp. the regular tò $\mu \dot{\eta}$... $\epsilon i v a \iota . .$. ). The same will apply to $\mu \eta$ with words of 'swearing' (originally meaning 'I swear the fact of this thing not being so'-cp. тò $\mu \grave{\eta} \tau o \hat{\tau} \tau o ~ \epsilon i ̂ \nu a \iota)$ and of 'denying,' partly due, originally, to contamination-v. Principle $X$.-of 'I state the fact of this thing not being so,' and of 'I deny the fact of this thing being so': indeed tò is sometimes found in this construction, but it must be remembered that when the construction began probably the 'Article' was still
to a great extent deictic and had not yet fully acquired the meaning which it expresses here.
2. Some uses of the Latin Participle (cp. IV. 1 (a) and IV. 2, pp. 37, 38).

Kennedy says that in instances like T. Manlius locutus fertur (Livy), fertur Prometheus coactus (Horace), Graecia collisa narratur (Horace), creditur velificatus Athos (Juvenal), etc., esse is always omittel. I doubt this. Was not the origin of these constructions, in some instances, the original logical equivalence of the nown + participle to e.g. 'the speaking of Maulius' 'the compelling of Prometheus' 'the crushing of Greece' 'the studding of Athos with sails' etc.? The ultimate meaning may be different. Such instances may sometimes be partly due to Greek influence, but are really natural extensions from constructions like (a) mortuos Caesar.
B. Addendum to Principle VII (on supplying Definite words) :

єi $\gamma \grave{a} \rho$ expressing a wish (cp. VII. 3, p. 50), e.g. єi $\gamma$ à ${ }^{\text {é }} \lambda \theta o \iota$ : here, perhaps, in carly times the same construction was used which would have been used had an expression like 'I should (have) rejoice(d)' been actually expressed. There was no need to express it, owing to the voice, gestmre, and context, etc. The nltimate meaning may be, 'O would that he would come!'

## APPENDIX TO PRINCIPLES II. AND III. ${ }^{1}$

## (Appendix I.)

On referring to their origins the constructions of Amalgamated or Syncretistic parts of speech: e.g. the Greek 'Genitive ' and 'Dative,' the Latin 'Genitive' ' Ablative,' 'Perfect' and 'Subjunctive:' (v. Chapter II. and the Cases).

It may be said, by way of preface, that syncretism evidently has two possible beginnings to work from,
(1) connexion of forms, and
(2) connexion of meanings: and that when two forms have become ultimately identical in some constructions or have (originally or by later development) identical meaning in some constructions, then the tendency may be for the forms to become identical in other constructions also, and for the meanings to become identical in other constrinctions also: e.g. suppose a form $A$ denotes $a+b+c+d+e$, and a form $B$ denotes $e+f+g+h+i, A$ and $B$ have a nentral ground $e$, using which as a stepping stone $A$ may extend over $f, g$ etc., and conversely $B$ may extend over $d, c$ etc.; or again, suppose $A$ comes to have sometimes (e.g. in some one declension) the same form as $B$, then $A$ may come to borrow $B$ 's form elsewhere (e.g. in some other declension) or vice versâ.

Now ever since Delbriick's pamphlet (1868) on the uses of the Locative, Instrumental, and Ablative in early or Vedic Sanskrit, down to the new Edition of Allen and Greenough's Latin Grammar (1859) and that of Monro's Homeric Crammar (1891), it has been almost universally thought correet to refer

[^9]well-nigh every construction of mixed cases to only one original source, without, as a rule, considering whether the forms justify the conclusion. The fact is to be emphasised that, where there are two or more views as to the original source to which a construction is to be referred, the different views are almost though not quite invariably given (as by King and Cookson) as alternatives, or as difficult to decide between (and difficulty implies ultimate possibility), not as 'both equally possible or probable in the present state of our evidence.'

The treatment of the Latin 'Ablative' may be considered first, because it is fairly typical of the treatment of syncretistic parts of speceh. It is almost entirely on the ground of Delbriick's collection of uses of the Ablative, Locative, and Instrumental, in carly or Vedic Sanskrit (possibly 2000 B.c.) that grammarians down to Allen and Greenough (1889) have reassigned almost every construction of the Latin Ablative to one of the three cases only, or, occasionally, to a second source as an alternative. The following table is from Allen and Greenough, p. 245: for a brief criticism v. the middle of this Appendix.

1. Ablative (from) $\begin{cases}\text { 1. } & \text { Of Separation, Privation, and Want. } \\ 2 . & \text { Of Source (participles of origin, etc.). } \\ \text { 3. } & \text { Of Cause (with gaudeo, dignus, etc.). } \\ 4 . & \text { Of Agent (with ab after Passives). } \\ 5 . & \text { Of Comparison ('than'). }\end{cases}$
2. Instrumental
Ablative (with) $\begin{cases}\text { 1. } & \text { Of Mamner, Means, and Instrument. } \\ \text { 2. } & \text { Of Accompaniment (with cum). } \\ 3 . & \text { Of Objects of the deponents utor, etc. } \\ 4 . & \text { Of Degree of Difference. } \\ 5 . & \text { Of Quality (with adjectives). } \\ 6 . & \text { Of Price and Exchange. } \\ 7 . & \text { Of Specification. }\end{cases}$
3. Locative Abla- $\begin{cases}1 . & \text { Of Place where. } \\ \text { 2. } & \text { Of Idiomatic expressions. } \\ \text { 3. } & \text { Of Time and Circumstance. } \\ \text { 4. } & \text { Ablative Absolute. }\end{cases}$

According to this table, the fusion must have been almost entirely the result of these three cases having had some forms ultimately indistinguishable. A somewhat similar treatment of the 'Ablative' appears in practically every grammar which attempts any Comparative Syntax, and this treatment is left moriticised in Reviews, i.e. it is tacitly accepted as correct and up to date in England.

When, however, we consider on what principles this treatment rests, and what extraordinary things its supporters must admit in order to justify it, the inevitable results are simply astounding. The present and orthodox doctrine in England is practically this, when reduced to its legitimate conclusions:
"Early Sanskrit (of perhaps 2000 B.c.) used the three cases to express certain relations: therefore it is certain that Latin (say of 100 B.c.) used these same cases to express these same relations: in Latin the thrce cases amalgamated, almost entirely owing to their sometimes having the same ultimate form: but we still attribute almost every construction of the amalgamated three cases (occasionally with difficulty) to some single one of the three, regardless of what its form may happen to be."

Some of the most obvious and important objections are here suggested :

1. In later (i.e. Classical) and even in early Sanskrit, we find not only the single case to which Allen and Greenough refer many constructions, but also, with little or no difference of meaning, one or both of the other two cases used occasionally or frequently: e.g. the Absolute construction is occasionally Instrumental as well as Locative, Accompaniment is occasionally Locative as well as Instrumental, and Canse is sometimes Ablative, sometimes Locative, and sometimes Instrumental; v. further in the middle of this Appendix, and in Appendix II. This fact is, by itself, sufficient to render a great portion of the Table in Allen and Greenough inadequate and incorrect.
2. If we consider the following rongh design of a section of the Indo-European family, as the latest theories suggest that it may have been, we shall best see the truth of the matter:

The details of Geographical position, etc. are not represented here : only an exceedingly rough approximation to accuracy is intended.


Represents a Dialect of the single language, just as
'Doric' is a Dialect of Greek, and Osean of Italian.
N.B. Some would place Armenian differently.

When Italian and Greek, and Greek and Sanskrit + Zend, were, as it seems probable they were, neighbouring dialects of a single language, differences of usage, both in forms and in syntax, may have already begun. Then the 'Aryan' or 'Asiatie' group moved away from Europe to Asia, and, when we first find it, it has already developed for such a long time by itself, and separately from Greek and still more from Italian, that (very roughly speaking) the important sound-changes of the vowels e and o to short a, and of $\bar{e}$ and $\bar{o}$ to $\bar{a}$, and of $k$ to ç, have been already accomplished: those who realise the gradual and almost imperceptible character of phonetic change can best realise the length of time which we must allow for these and other hardly less important growths. In the face of this evidence of a long development of Sanskrit, which was separate and different, phonetically, from that of Greek and Latin, no one has a right to say that the syntax of Greek and Latin of 2000 в.C. was exactly the same as that of Sanskrit of 2000 b.C.; yet, even if we were to grant this identity, we could not ignore the probability of developments in Latin, distinct from the
usages of old Sanskrit, between 2000 b.c. and 100 B.C. This will be more fully discussed below.

And it is not a consideration of Phonetics merely as Phonetics which opposes such a conclusion; for phonetics probably huve an important influence on the development of Siyntax. If we look at the forms of the Dative and Locative in Sanskrit and Latin, we see that Latin -i might look like both a Locative of the o- declension, or of the i- declension, and a Dative of the consonant-decleusion, and the form -is in the a- and o-declensions might possibly be phonetically both Dative ( $\bar{a}+a i+s \rightarrow \bar{a}$ is $\rightarrow$ ais $\rightarrow \bar{i} \mathrm{~s} ; u+\mathrm{ai}+\mathrm{s} \rightarrow \overline{\text { ous }} \rightarrow$ ois $\rightarrow \overline{\mathrm{i}} \mathrm{s}$ ) and Locative $(\overline{\mathrm{a}}+\mathrm{i}+\mathrm{s} \rightarrow$ ais $\rightarrow$ is; oi or ei $+\mathrm{s} \rightarrow$ is), whereas there was not this identity of form in Sanskrit. Again, if we look at the forms of the Ablative, Locative, and Instrumental, in Sanskrit and Latin, the final d of the Ablative did not disappear in Sanskrit, but did, in Latin, at any rate after long vowels: again, the Instrumental and Locative did not, phonetically, become ultimately identical in form in the consonant-declension in Sanskrit, and present other differences also.

The influence of the many diverse phonetic conditions of Sanskrit and Latin Syntax is not to be ignored. And, lesides this, there were other important differences in the conditions under which Sanskrit and Latin Syntax developed-such as differences of scenery, climate, and food, neighbouring countries and peoples, political constitution, and customs, and character, and manners of thought : such differences of conditions constitute the chief reasons why no two languages have cxactly the same development. Thus, if ever Volapiuk were spoken by all nations, after a hundred years it would probably have diverged into many different dialects of Volapiik, and hence into many different languages.

And even this list of the different conditions of Sanskrit and Latin is not exhanstive.
A. Early Sanskrit Syntax was in a more 1 mimitive state of development than Latin Syntax of 100 b.C.
( () To a great extent simple cases are used rather than prepositions governing cases: in fact a great number of adverbs
have not yet developed fully into prepositions, but are still adverbs, in the main (and (1) added to define and strengthen a relation already (?) expressed by the simple case, or else (2) combining with a verbal to form a new notion which governs a simple case, or else (3) governing a case by themselves as many adverbs can, cp. 'together' + instrumental ' with ;' 'away + ablative 'from ;' 'near' + accusative 'to ;' 'in the nerghbourhood'+genitive 'of:' and v. under the Accusative). And it is of the utmost importance to realise that the definite meaning expressed by a simple case was, as a rule, at any rate ultimately different to the meaning of a case when really 'governed' by a preposition. There is a great gulf between the meaning of C'arthagine 'at Carthage,' Romà 'from Rome,' where the 'at'- notion, and the 'from'- notion, lie practically in the case-endings themselves, and of urbe, and oppido, in e.g. in urbe, ab oppidō, where the 'at'- notion, and the 'from'- notion lie almost entirely in the prepositions. We can easily define the case-relation of Carthagine and Rome to the verb: can we in the same way define the case-relation of urbe and oppido to in aud ab, in e.g. in urbe, ab oppidó? (v. under the Cases).

There are other phases of an early date in the other departments of Syntax: the development of Parataxis into Hypotaxis is still in its infancy except that the 'Relative' is a real Relative, and not a Demonstrative or Indefinite or Interrogative Pronoun, etc. In particles and in the subjunctive and optative we can still easily see the old paratactic meaning, even if it is no longer the meaning, or the only meaning, which the construction conveys. In the 'article' we can still easily see the meaning of a demonstrative or personal pronoun, even if it is no longer the meaning, or the only meaning, which it conveys. Seutences are generally short, and connected by simple 'and,' 'but,' 'then,' etc. if connected formally; they are not woven into complex and artistic periods.

And, to return to the cases, not only does early Sanskrit, as a rule, denote a definite relation by a case-suffix, while in Latin the preposition often extends over the old function of the case-suffix, and leaves the case-suffix sometimes little, sometimes nothing, of its old force, not only is there this vastly
different meaning denoted by the case-relation according to whether it is governed by a preposition, or a simple case not governed by a preposition, but
(b) In early Sanskrit a variety of constructions (as of forms) exist side by side often with little or no difference of ultimate meaning: in a later stage of language some might be dropped in some declensions, and others in other declensions, or other equally important developments might take place.
(c) As time and civilisation go on, so the need for the expression of new ideas arises: and new ideas can be conveyed cither by forming new creations, or by analogical extensions from already existing creations. For instance, one point of view from which price was at first regarded (perhaps as the means of obtaining something) might possibly have altered in a thousand years or so, and this alteration might have given rise to a new construction. Even if Latin did once use only the Instrumental to express 'price,' how can we tell that Latin never used any other case, or even that, before historic times, another case did not extend over and swamp the Iustrumental ?

The possibility may be illustrated by the following figure

(d) In course of time, even though a language may already have a construction which denotes a certain meaning (e.g. an Ablative to denote 'parted from') quite clearly, it may yet extend some other construction (by analogy) to express this same meaning as well (e.g. an Instrumental to express 'parted with' on the analogy of phrases like 'no longer mited with:') such analogical extensions are unavoidable, even if some may think them 'umnecessary:' v. Principle XIV.

These and others are differences between the carlier and later stages even of a single language, and not unlike those between the language of Homer and the language of Demosthenes.

And, if an early stage of Sanskrit has been shown above to differ in its conditions from an early stage of Latin, and if an early stage of a language from a later stage of the same language, how great will be the difference in the conditions of development between an early stage of Sanskrit and a later stage of Latin !

Besides the difference between the early and later stages of development there are also what we may roughly call
B. Literary differences between Sanskrit and Latin: some are suggested here.
(a) Sanskrit abounds in compounds. Some 'Tat-puruṣa compounds normally contain a noun in the second part defined by a noun-stem in the first part, and, logically, governing it almost invariably in the way in which a noun governs another nown in the genitive. Though grammarians say that the first noun defines the second nom in other case-relations, in reality there will be found to be scarcely any instances where a genitive would not be the possible, or even the rearest, syntactical equivalent. What a vast difference it might have made to the Latin cases had Latin preferred compounds like igninomus to syntactical expressions like ignis * tomitor, or qui nomat ignem.
(b) Early (and much of later) Sanskrit is poetry, and to a great extent the language of prayer and praise, and so its Syntax should be considered from a very different standpoint to that from which we consider a Syntax which Prose usage has narrowed down into certain chanmels: a glance at Cicero beside Catullus or Lucretius shows how different the Syntax of Prose is from the Syntax of Poetry belonging to the same epoch; poetry, in its forms and constructions, is varied and free; it can use the new or the old, the strict and conventional or the boldly extended, the lucid or the suggestive. Latin Prose has this variety and freedom curtailed, and is, aloove all things, unmistakeably clear and explicit.

Other features, especially prominent in later Sanskrit, are e.g. the use of the Instrumental and Passive in preference
to the Nominative and the Active, the almost entire absence of 'oblique speech' owing to the use of 'iti' (which almost answers to our inverted commas), the Accusatival Infinitive, the growth of an Indeclinable Participle (originally Instrumental of a verbal noun, ep. Latin it volando), and the Participle used with the meaning of a finite verb.

If, then, we consider what right we have to say that, because early Sanskrit developed an Instrumental use to express some relations, therefore Latin did so, and never developed any other, we find that this cannot be proved even if Latin be the direct descendant, instead of the somewhat distant cousin, of Sanskrit. Allen and Greenough's view savours strongly of the old illusion that, because Sanskrit has the oldest extant literature, therefore it is, if not the parent language, yet more like to it, in every respect, than Creek or Latin ; it further seems to imply that the cousin (or son?) in Italy never developed any construction without first seeing whether the cousin (or father?) in India had developed it!
3. An obvious question is: Can we not, in any one language, conjecture why two or more parts of speech have amalganated? Can we not infer from this why the three cases in Latin amalganated more or less closely?

Now, by way of preface, two things may be said:
I. The only classification which the strict Philologist can accept is probably the classification by forms-(though even this is apt to be dangerous, if carried out without excessive caution, v. end of this Appendix, and also Appendix V.). If we have a Genitive form עuктós, or a Genitive form Kúpov i$\pi o \theta a \nu o ́ \nu \tau o s ~(a j \hat{\eta} \lambda \theta \epsilon \nu)$, or a Genitive form $\pi o \hat{v}$; we must, strictly, classify it as probably a Genitive, even if it seem to us to have the present meaning of an original Locative: and, if we carry out this principle (with more reservations than Modern Philology thinks it essential to make), if we are so strict as to call $\nu \cup \kappa \tau o ́ s, K$ Ḱpov atrotanóvtos, and mố; Genitives, although they may now have the meaning of original Locatives, what mmst we call e.g. animi, mensae, marpí, but Locatives, and, very possibly, Locatives only: if their meaning does not
seem to us Locative, then it is because we do not realise how far a Locative might extend under the influence of the Principles of Development in language, such as Analogy, Contamination, Implication, etc. Of one thing we may be quite sure-a form had its own meaning and was not used simply because some other form had, or had had, the same meaning, but because it had this meaning itself. If another form had, or had had, the same meaning, this must be regarded as an incidental circumstance rather than as a cause. This should be a commonplace, but we are told that 'the genitive $\pi \epsilon \delta i o \iota o$ ( $\theta$ ' $\epsilon \iota \nu$ ) is used because' (not although !) 'the casemeaning here originally was expressed by the Instrumental case-form.' We must, strictly, on the principle here maintained (which perhaps often excludes mere considerations of convenience), call simus optative, because it is still optative in form, even if it may have sometimes extended over an originally subjunetive meaning, and we must call ferāmus subjunctive, because it is subjunctive in form, even if it may have sometimes extended over an originally optative meaning. If we once begin to classify by meanings, saying that a certain construction has an optative meaning only, and another construction a subjunctive meaning only, we shall often have to maintain theories against facts: whereas, if we classify by forms (and make the necessary reservations), we have phonetic law as our strong fortress against criticism, and besides this we are consistent: for, if we always call Sanskrit optative forms optatives, even when they may have a meaning originally denoted by the subjunctive, we must do the same with Latin optative forms.
II. Secondly, we should imagine, a priori, that, if two forms expressed originally or ultimately identical meanings in some or many constructions, then in these constructions and hence, by analogical extension, in others also, one of three things might happen, though of course the two forms might continue to be used, side by a side, with a meaning generally identical, and perhaps occasionally different, owing to traces of an original meaning or owing to later differentiation.

1. The two individual forms might be fused, by contamination, into one single form made up of elements of both.

2 . One form might be disused, partially or wholly, in some constructions, and the other form might be disused in other constructions: v. under the Cases.
3. One form might be disused altogether (or only survive in fossilised expressions no longer associated with the constructions to which they originally belonged) and the other form might (with these exceptions) be used everywhere.

On the other hand we should perhaps imagine that, even if the forms became identical by phonetic law, still, if the meanings were not ultimately identical, the one form would continue to be used with its two meanings kept quite distinct. Of course I do not maintain this as certainty. But we see that amare 'be thou loved,' amare 'thou art loved,' and amare the infinitive are (at any rate ultimately) identical in form, yet they have no identity of meaning parallel to mente from a possibly Locative origin, and mente from a possibly Instrumental origin. That identity of meaning can arise from mere identity of form all by itself is, generally speaking, prima facie improbable.

Let us first take the Latin Aorist and Perfect Indicative, and consider what were, possibly or probably, the early forms of these two tenses in Latin: of course tenses were not as a gencral rule formed by adding terminations to stems, but by analogical extensions from a few primitive types and so on: but the analytical method is more convenient to us, if used with all due restrictions; again, the changes produced by the union of the final letter of the stem with the initial letter of the termination (which were probably Indo-European) are not represented here. The table is from Conway, with a grood many alterations. It is far from certain, as oî $\delta a$ seems to be made the crucial test of what the diphthong in the first syllable was: whereas Latin ī and Sanskrit e can equally well go back to ci, an Ablaut variation.

| PERFECT ACtive. | PERFECT Middhe. | AORIST' |  |
| :---: | :---: | :---: | :---: |
| noid-m | nid-ai | e uneidasm | e deiksm |
| noid-tha | nid-sai | eneidass | e deikss |
| noid-et | uid-tai | e neidast | e deikst |
| nid-mos |  | e neidasmos | e deiks-[0]mos |
| nid-te(s) |  | e nucidrstes) | edeiks-te(s) |
| uid-nıt(i) |  | c,ueid ${ }^{\text {desnt }}$ | edeiksnnt |

It will be seen that, according to Phonetic Law, perhaps the two tenses are or become identical in, practically, no single form' ${ }^{1}$ : that is to say, the ultimate amalgamation of the forms of aorist and perfect in the sigmatic perfect must have originated not from any identity of form, but from partial and possibly, by analogical extension, complete ilentity of meaning. Looking at the forms, which are sometimes a mixture of active aorist and active and middle perfect forms, sometimes (possibly) a mixture of the active and middle forms of the perfect only (any dogmatism is quite out of place), we cannot suppose them to have been produced by anything else but the originally or ultimately (complete or almost complete) identity of the meaning of these two tenses of the Indicative.

Let us now take the Latin 'Subjunctive.' Here we find forms which are either optative (c.g. simus) or subjunctive (e.g. ferāmus) used with no difference of meaning, or with practically no difference of meaning, i.e. we know as a certain fact that, whether the surviving form be optative or subjunctive, the meaning is the same. And yet, phonetically, it is possible that there was hardly any identity between the forms of subjunctive and optative (but v. Appendix III.). Here again, then (just within the limits of possibility), we must suppose an original or ultimate identity of meaning (whether complete or partial) to be the chief cause of the identity of the meanings of the forms which survive, whether they be optative or subjunctive.

Thirdly, let us take the Sanskrit subjunctive and optative: in early Sanskrit we (?) may perhaps see a distinction in the use of the subjunctive and optative, vaguely corresponding to the distinction in the use of the Greek subjunctive and optative in Homer. Or else we see their meanings practically identical. Lastly, we have the almost entire disuse of the subjunctive forms, except with certain stereotyped forms and meanings (e.g. as an 'Imperative' 1st person singular), and the regular use of the optative forms with the meaning which optative and subjunctive could once both convey almost equally well. Here

[^10]again there is no identity of form: it is the identity of meaning which causes the subjunctive form to practically drop out as being unnecessary; on a somewhat similar principle we do not use two pairs of cricket boots for one cricket match.

Fourthly, let us consider, on the one hand, what may possibly have been the early and ultimate Italian forms of the Genitive and Locative singular of the a- and o- declensions, and, on the other hand, the early and ultimate Greek forms of the Genitive and Locative singular of the o-declensions: for a fuller account v . at the end of this Appendix.

| Latin. | o-declension | locative. $\left.\begin{array}{c} \text { oi } \\ \text { ei } \end{array}\right\} \rightarrow i$ | ? | genitive. $\text { oes } \rightarrow \mathrm{ois}^{\boldsymbol{i}} \rightarrow \text { is }{ }^{1} \text { etc. }$ |
| :---: | :---: | :---: | :---: | :---: |
|  | $\bar{a}-$ declension | $\stackrel{\text { aii }}{ } \rightarrow$ ae |  | $\overline{\mathrm{a}}(\mathrm{e}$ ? $) \mathrm{s} \rightarrow \overline{\mathrm{a}} \mathrm{s}$ |
| Greek. | o-declension | $\begin{aligned} & 0 \backslash \\ & \epsilon i j \end{aligned}$ |  | $\begin{aligned} & o \sigma \omega \rightarrow 0 \omega \rightarrow 00 \rightarrow o v \\ & \epsilon \sigma \omega \rightarrow \epsilon \omega \rightarrow \epsilon 0 \rightarrow(\epsilon v \text { or }) o v \end{aligned}$ |

Is there any phonetic identity between the ultimate forms of Genitive and Locative in these or other declensions except that of the Genitive singular and Locative plural of the odeclension, e.g. animis? and yet, do we not find that in the Latin o- and $\bar{a}$ - declensions, and, in certain dialects, in the Greek o-declension, a Locative form is used, not only with some Locative meanings, but also with meanings which must once have belonged to the genitive only? In the Latin oand a- declensions, and in the Greek (dialectic) o- declension, the genitive form is rarely used, and the Locative form is the regular one, whereas in the Greek o- declension the Locative form is rarely used, and the Genitive is the regular form. What conclusion can we draw save that the disuse of one form and the use of the other form in one declension, and the reverse in another declension, is due to the Genitive and Locative having ultimately identical meanings (not forms) in many constructions-apparently this alone can account for the practical identity of meaning, whether the form be Genitive or Locative.

[^11]The forms of the Greek Dative, Locative and Instrumental might possibly have developed thus, phonetically: for a fuller account $v$. at the end of this Appendix.


$$
\text { Plural } o+\mathrm{ai}+\mathrm{s} \rightarrow \overline{\mathrm{o}} \mathrm{i} s \rightarrow o c s \quad \mathrm{~s}, \mathbf{i}+\mathrm{s} \rightarrow o c s
$$

Consonant $(\mathrm{x}) \quad$ consonant $+\mathrm{ai} \rightarrow \mathrm{x} \alpha \iota$ consonant $+\mathrm{i} \rightarrow \mathrm{x} \iota$ consonant $+\mathrm{a} \rightarrow \mathrm{x} \alpha$ declension

It is just possible that $\nu \eta i^{\prime}$, and words like it, might arise from nāuai $\rightarrow$ nāai $\rightarrow$ nāi $\rightarrow \nu \eta \iota$ (Dative) as well as from nāui $\rightarrow$ nāi $\rightarrow \nu \eta \iota$ (Locative).

These are some of the possible data which we have before us as to the history of Syncretistic parts of speech-we have before us ultimate (complete or partial) identity of meaning which seems rarely or never (the Greek Dative and Locative are excepted) to have originated in identity of form as the result of phonetic law: we may lay down as a general rule, that the possible surviving forms of the Latin Ablative, Instrumental, and, except in the $\overline{\mathrm{a}}$ - and o.- declensions, the Locative, convey practically the same meaning, but that in the consonantdeclension the Ablative form, in the $u$ - declension the Instrumental form, have possibly died out (but v. the end of this Appendix). But, whatever form is used, the meaning is practically the same: i.e. the three forms, where they survive, and if they do all survive, have the same ultimute meaning. Judging by the many relations which are shared, with practically no difference of meaning, by two or all of the three cases in

[^12]Sanskrit and English, we may state as a possibility that the ultimate identity of the meanings of these three cases may have precerled any identity of form, and that one form may have been dropped before it became identical with one of the other two. To take an instance, supposing 'price' to have been expressed by Instrumental $-\breve{a}$ and Locative -ri, with ultimately identical meaning, it is possible that Instrumental $-\breve{l}$ may have been disused in this construction while it was still between $\check{a}$ and $\breve{e}$ in sound, and that the Locative -ĭ may have been always used in this construction (with the meaning common to itself and the Instrumental), while it was still between -ĭ and -ĕ in sound-or vice versâ. So that, in this construction, Locative and Instrumental might never have been identical in form, but, while they were still different in form, one would have been dropped, exactly as we seem to see one form dropped, owing to identity of meaning, in the case of the Genitive and Locative of the $\bar{a}-$ and $o$ - declensions, and the Latin and Sanskrit Subjunctive and Optative, and possibly in some forms of the Latin Aorist and Perfect. In fact it is just within the limits of possibility that mo form of the Instrumental case has come down to us in Latin, i.e., no form can conclusively be proved to be Instrumental only. In Greek also the comparatively few forms like тики' are the only forms which may perhaps be instrumental only, and these seem to be no longer instrumentals like other instrumentals, but are fossilised adverbs, and so would anyhow be most likely to be preserved: v. further under the Cases.

However, this possibility can scarcely be called a probability, although it might be supported, in the case of the Greek 'Dative' and Latin 'Ablative,' by
(a) the ultimate identity of the meanings of two or all of the three cases, in many constructions, in Sanskrit and English: [ v . the criticisms of Monro's ‘Dative’ and Allen and Greenough's 'Ablative' further on in this Appendix, and also v. Appendix II.]:
(b) the process which must have taken place in some other mixed or syncretistic parts of speech, viz. that phonetically there was no identity, or practically no identity, of form, yet that one of the two forms ultimately dropped out because
of the original or ultimate identity in the meaning of the two forms:
also, in the case of the Latin 'Ablative,' by
(c) the fact that the -d of the Latin Ablative in the o- declension was preserved in writing till historic times, and therefore, probably, till not long before historic times in pronunciation, and that this would prevent connexion of form between the Ablative and the other two cases.

It is just possible then that pede ${ }^{1}$ and other similar formations are e.g.

1. sometimes phonetically locatives only, sometimes phonetically instrumentals only: or
2. always phonetically locatives only, or else always phonetically instrumentals only: or
3. a production arising from contamination of ablative ${ }^{1}$

[^13]*ped-od(?) *ped-ed(?) mental forms in some stage of development from pedi to pede, and from peda to pede, respectively: and v. also at the end of this Appendix.

The same will apply, mutatis mutandis, to words like $\tau \iota \mu \hat{\imath}$ in Greek.

The same will also apply to the Greck Genitive and Ablative: some of the forms might possibly have been, and have developed as follows, phonetically: (for a further account v. at the end of this Appendix).


It seems more natural to suppose that the ultimate identity of the forms of Greek Genitive and Ablative, of Greek Dative, Locative, and (?) Instrumental, of Latin Ablative, Locative, and Instrumental, did probably accelerate and direct the fusion of meaning. How far it did we cannot say.
4. I have already tonched on the fourth objection to Allen and Greenongh's results. Supposing we find another lamguage comnected with Latin perhaps as closely as early Sanskrit is, or even more closely, and in a developed condition not very mulike that of classical Latin so far as the use of prepositions etc. is concemed, are we to refuse to use it in evidence? Surely there is a course to be steered between making it an absolute test of what happened in Latin (this would be absurd) and utterly

[^14]ignoring its evidence. The Syntax of every cognate language, especially of a language in a somewhat similar state of development, is of some value, if we ouly recognise and do not overestimate its importance. If a construction occurs in Sanskrit, it does not follow as a fact that it ever occurred in Latin, still less that it was the one and only construction at all times in Latin, but it usually follows that it may possibly have occurred in the Latin of one period or another: beyond this we cannot go far, until we have the whole history of Latin Syntax from Indo-European times till Plautus as evidence. If we can make this use of Sanskrit, we can make almost the same use of English, which has, however, been largely influenced by other languages: if a construction occurs in English it does not follow as a fact that it ever occurred in Latin, or that it was the one and only construction in Latin, but it usually follows that it may possibly have occurred in the Latin of one period or another. A knowledge of other Indo-European languages, which (with the exception of Greek), unfortunately, I do not possess to any appreciable extent, can do nothing more than give further possibilities or render more probable possibilities already inferred: cp. Principle II.

To sum up, if we try to refer to Locative Instrumental and Ablative origins the constructions of the Latin 'Ablative,'
I. Strictly speaking, the forms should be our guide, but as pede which, as suggested above, may be possibly, in origin, one of many things, and as domino, which in form may possibly be both Ablative and Instrumental, show that the three forms may be, and cannot be disproved to be, used with practically the same meaning, we should have to be content with referring every construction possibly to all three original sources and suggesting, as far as we can, owing to what developments each case-form might possibly have come to be used with most of the meanings of the once separate three cases;
II. Parallel constructions with prepositions are valuable, but are not conclusive proof: fidere in aliquo is not conclusive proof that the Locative was the only original case with verbs of 'trusting:' for all we know, the 'Ablative' in fidere aliquā re
may originally have had a different meaning, and have been in a different case, from fidere in aliquo ; cf. also diffidere de aliquā re;
III. The appearance of one of the three cases in Sanskrit tells us, not that this case actually was used, still less that it alone was used, in this construction throughont the history of Latin. It usually tells us that it might possibly have been used in this construction in the Latin of some period or another;
IV. The appearance of an approximate equivalent to one of the three cases in a construction in English tells us not that this one case actually was used, still less that it alone was used in this construction throughout the history of Latin, lont it usually tells us that it might possibly have been used in this construction in the Latin of some one period or another ;
V. Greek, and other Indo-European languages, can similarly give us further particulars as to possible Latin developments, or turn what are already possibilities into probabilities;
VI. In tracing prohistoric developments, as a rule we can have no ground, or little ground, for asserting facts: we must confine ourselves to suggesting possibilities and probabilities until we have in our hands trustworthy records of the whole history of the three cases, from Indo-European times down to 300 в.c.

In conclusion, I venture to suggest, how far is the dogmatic and absolute treatment by Allen and Greenough (of the Latin 'Ablative') and by Monro (of the Greek 'Dative ') justifiable if any one of my four main arguments is correct? I append a criticism, suggesting some of the possibilities which Greek and Latin and Sanskrit and English justify us in inferring and suggesting. For details as to the logical development of the Locative, Instrumental, Ablative, and Dative, v. Chapter IV., the Cases.

Monro's Homeric Grammar, p. 13.5 foll. (New Edition).
"Comparison of the case-system of Greek with that of Sanskrit shows that the Greek Dative does the work of three

Sanskrit cases, the Dative, the Instrumental, and the Locative. There is also reason to think that distinct forms for these three cases survived down to a comparatively late period in Greek itself. This is made probable
(1) by the traces in Homeric Greek of Instrumental and Locative case-forms, and
(2) by the readiness with which the uses of the Greek Dative (especially in Homer) can be re-apportioned between the three cases, the original or true Dative and the two others."

Before examining the instances, it may be as well to show how far Mr Monro's positive statements, backed up by his great reputation as a Homeric scholar, should be taken for granted, as they are, by the majority of those who read his book.

1. 'The Greek 'Dative' does not do the work of three Sanskrit cases: it does some of the work of three IndoEuropean cases extended by centuries of development: that it does not do the work of three Sanskrit cases (tloes Mr Monro think that Greek was directly descended from Sanskrit?) is clear when we consider that it rarely expresses the absolute case, the object or purpose, the object of emotion with a substantive, etc., etc., etc. A comparison of the Sanskrit constructions of Locative Instrumental and Dative will put this point beyond doubt (v. Appendix II.).
2. As to Locative forms, in what declension do they not survive as 'Datives' (or rather, in what declension can they be proved not to survive), except (possibly) in the o- declension, where the few survivors have the meaning generally of 'place where,' and 'place to which' (e.g. $\pi o i$, ), and in certain dialects are used with the original meaning of genitives? but v. further at the end of Appendix V.

As to distinct forms for the Instrumental 'surviving down to a comparatively late period,' are not the number of adverbs in $-\eta,-\omega$, and $-a$ (which are in origin possibly Instrumentals, though e.g. the first two might be sometimes, so far as we can tell, Ablatives as well or only Ablatives) very small, and where,
besides in adverlss (i.e. in ease-forms originally instrumental in meaning, but separated as a rule from other instrumentals by becoming fossilised and stereotyped and equal to our adverbs in -ly), does the Instrumental certainly survive?

Lastly, what certain traces have we of Greek Datives thronghout the length and breadth of the consonant declension, except the Infinitives in -al, and e.g. $\lambda \hat{v} \sigma a \iota$, and $\chi a \mu a i$, which have beeome to a large extent fossilised before historie times?

How many centuries has it taken for the distinct forms for these two cases to disappear and die out of use so thoroughly in these dectensions? Mr Monro would seem to imply that such a disappearance only takes quite a short time: but those who know something about the extraordinary time which even small changes require in langrage, and who realise that in these declensions the case-forms may be almost dead except where they survive as fossils, will be somewhat doubtful as to the conclusions formed.

I have here critieised Mr Monro's Philology as leniently as possible: for he really does not seem to have realised or serionsly reflected on what the Problem is. But, even if one judges by this enrsory glance, it must be acknowledged that those who cannot check these results of Mir Momro's even by the most rudimentary elements of Modern Philology, and who use Mr Monro's book as their text-book, will not obtain a very comprehensive or clear or correct view as to the nature and history of the Greek ' Dative.'
3. As to 'the readiness' with which the nses can be still re-apportioned respectively to one case alone, or to another (not as well but) as an alternative explanation, whenee does it arise? From the forms? If so, why assign anything worth mentioning to the Instrumental, which perhaps survives in adverbs only, and how distinguish between the ease-meaning of the Dative (e.g. $\lambda$ ó $\gamma \omega$ ) and the Locative (e.g. ṕr $\mu a \tau \iota$ ) ?

If from the meanings, then it will be seen, in the instances below, how far Sanskrit, English, and Latin, tend to produce this readiness: It seems that Mr Monro, 'without attempting to write a Comparative (Grammar’ (v. his Preface) has, unknowingly, ventured to dogmatise where a minute knowledge
of the whole history of the three cases in every other IndoEuropean language could never justify dogmatic statements as to the history of the three cases in Greek: and Mr Monro evidently has and certainly displays a somewhat limited knowledge of Sanskrit case-constructions, and makes little use of English or Latin, and ignores the forms of the Greek cases!

I select the instances that best illustrate my arguments and in the treatment of instances I repeat a great deal of what is given in the body of the work in order that a comprehensive view of the Greek 'Dative' may be obtained.

The constructions in Sanskrit, Latin, Greek, and English, are suggested here as possible in the Greek of some one period or another, and in some constructions, not necessarily in all. The same must be understood of the constructions suggested under the 'Instrumental Dative,' 'the Locatival Dative,' and the Latin 'Ablative.' Moreover they are suggested as additional, not as alternative origins, and as not necessarily the ultimate meanings. And they are meant to almost entircly ignore the present forms: [v. Appendix III.].

And, moreover, as I said at the begimning of this Appendix, supposing a form $A$ denoted meanings such as $a+b+c+d+e$, and a form $B$ denoted meanings such as $e+f+g+k+i$, it is possible that $A$ used $e$ as a stepping-stone on to the meanings $f+g$ cte., and $B$ used $e$ as a stepping-stone on to the meanings $d+c$ etc., so that both $A$ and $B$ at one time could perhaps equally well denote $a+b+c+d+e+f+g+h+i$ and other meanings as well: the problem is to find which or how many of the meanings of $A$ and $B$ are represented by $e$, i.c. which meanings actually were the stepping-stones by which $A$ passed on to $D$ 's land and $B$ on to $A$ 's land. I have done wrong in making nearly every meaning a stepping-stone, for
(a) The identities of forms probably did much to increase the number of stepping-stones or identical meanings, and
(b) The reason why $A$ came to denote $i$, and $B$ came to denote $a$ was perhaps not the reason given below, but the fact that $A$ and $B$ had the same meaning in seven constructions out of nine, whence it came to be used imdifferently in the other
two also. But as I cannot tell what meanings correspond to $e$, and what meanings to $a$ and $i$, I have adopted the safer plan of the two, viz. that of putting almost everything down to $e$, with the proviso that this is only the possible development.
'True Dative:’ $\tau 0 \hat{\iota} \sigma \iota \nu$ á $\phi є i ́ \lambda \epsilon \tau o:$ the Dative would possibly be largely due to the analogy of $\tau о \hat{\sigma} \sigma \iota \nu \not ้ \delta \omega \kappa \epsilon \nu$, and, in Sanskrit, with verbs of giving a Locative is often found: (what does ' took away for (i.e. from) them ' mean ?) for the possible Instrumental origin as well, cp. English 'parted with,' on the analogy of '(not) met with,' '(not) joined with,' and Sanskrit Instrumentals with words meaning 'separated,' on the same analogy, v. Principle V. A. 2: and v. further the Cases in Chapter IV. throughout.
 (or of the 'person concerned') would perhaps be the name given to this: for the possible Instrumental origin as well, ep. English 'with me,' e.g. 'with Him there is no respect of persons:' for the possible Locative origin as well, cp. English 'in me,' for there is no help in them,' and the Latin 'in me' occasionally, and Pindar's use of $\epsilon \dot{\varepsilon} \nu$ : v. further the Cases.
 interpretation of the passage, the Dative would mean 'for my sake:' for the possible Instrumental of cause or circumstance, cp. 'let me not be the means, or circumstance, of your blaming:' for the possible Locative, cp. the Sanskrit Locative of cause of anger, etc., and our English 'find fanlt at or abont' = 'because of,' and the Latin 'in me' $=$ 'so far as concerns me.' But the Greek almits of another interpretation which I do not discuss here: v. further the Cases.
 Agent was originally something like the Dative of 'the Possessor,' but its meaning developed into that of the Agent, just as 'this thing is his deed' levelopes into 'this thing has been done by hin,' and rov̂̃’ av่т $\hat{\imath}$. $\pi \epsilon \pi \rho a \gamma \mu \epsilon ́ \nu o u$ ' $\epsilon \sigma \tau$, originally (in so far as it has an original Datival meaning) 'this is your deed' into' this has been done by you:' for the Instrmmental of the Agent, ep. Sanskrit throughout, and English 'by,'perhaps: the Locative, if ever used by development of meaning only, would
be on the analogy of plurals, perhaps, e.g. 'that thy ways might be known among men, thy saving health among all nations,' cp. also Pindar's use of $\dot{\epsilon} \nu$, and $\tau \dot{\lambda} \lambda \eta \theta \grave{\epsilon} s ~ a ̀ \nu \theta \rho \omega ́ \pi o \iota \sigma \iota \nu$ où $\chi$ єن́píc$\kappa є \tau a \iota: ~ v . f u r t h e r ~ t h e ~ C a s e s . ~$
$\tau \hat{\varphi}$ रúo yeveai द́ $\phi \theta i a t o:$ for the Dative not unlike that of 'the Possessor,' ep. 'he had had, or had seen, two generations pass away:' for the Instrumental, ep. 'with him' $=$ 'in his time:' for the Locative, cp. the Sanskrit use of the Locative to express 'with,' which originated with plurals probably, e.g. 'with or in the assembly,' or cp. the Greek $\dot{\epsilon} \pi i=$ 'in the time of:' v. further the Cases.
 our English 'to ' and the Sanskrit and occasionally the Zend Dative to express 'motion to' or 'arrival at:' the Instrumental would be like the Instrumental absolute to express circumstance 'with the enemy hard-pressed:' the Locative would be either the Locative absolute with the same meaning, or the Locative expressing 'place or person to whom'-cp. Sanskrit, and our 'I aim at' $=$ 'I aim tnwards,' 'I go there' $=$ 'I go thither,' v. Principle V. B. 3.

With verbs of 'giving,' 'showing,' and 'telling,' Sanskrit uses a Locative side by sille with a Dative, something like the Lecative in the lest instance, and cp. 'distribute $\left.\begin{array}{l}\text { show, tell }\end{array}\right\}$ among:' with words of 'being angry' Latin uses a Dative of (?) the object of the anger : the Instrumental might have expressed the means or the circumstance that mate one angry, cp. 'angry with,' and the Locative might have corresponded to the Sanskrit Locative of cause, etc. with some verbs of anger, especially in the Loeative Absolute, and to our English 'angry at,' 'angry about.'

With verbs of 'giving commands' $\mathrm{c} p$. above on words of 'giving,' ete.

With verbs of 'heing king,' ete. the Dative might originally have meant 'to be king for $\left.\begin{array}{c}\text { mito }\end{array}\right\}$ the people,' 'to be the people's king,' cp. the Dative of the Possessor : the Instrumental 'to be king with or among the people,' the Locative 'to be king among the people.' The 'Dative of the Agent' has already been eonsilured: v. further under the Cases.

The Instrumental Dative: (v. further the Cases, Chapter TV.).
 Instrumentals might have expressed the circumstance, and corresponded to our 'with;' as Locatives, we should compare Sanskrit Locatives, and our 'in:' for Dative v. the Cases.
 back to an original Dative 'am a care to men,' Locative 'among men,' and Instrumental 'with men.' 'The dódou $\sigma t \nu$ may possibly go back to an original Dative like our 'for'-perhaps the Dative may have been extended by analogy of the Dative of the Agent, and from instances where it expressed both the purpose and the cause or circumstance to instances expressing the canse or circumstance ouly, cp. 'I sought it for money' $=$ 'in order to gain money I suught it, money was my object,' and 'money was the means of making me seek it:' the Locative of canse appears most frequently in the Locative Absolute, e.g. 'they were troubled at Caesar('s) departing:' the Instrumental might have expressed the cause, means, and circumstance of 'my being a care into men:' v. further the Cases.
 the Latin Dative, and our 'give way to:' the Instrumental might have originally expressed the means or circumstance that made them give way; and the Locative would again express 'cause,' give way at' or be used with a Datival meaning 'to' (v. Primeiple V. B. 3) : v. further the Cases.
 expressed the means or circumstance, and the Locative the cause, something like our 'at the wind blowing.' Accompaniment is denoted in Sanskrit by a Locative as well as by an Instrumental, as explained above: v. further the Cases.
$\kappa \dot{v} \mu a \sigma \iota \iota \epsilon ́ \mu \pi \epsilon$ : the Instrumental, hardly of means perhaps, but rather of attendant circumstance, and the Locative of 'place where,' like our ' on,' 'over,' etc. are here possible. For the Dative expressing 'place where' etc., partly owing to a contamination of 'I go thither' 'I shall be there,' producing 'I shall be thither,' ep. the dialectic 'to-home' ='at home' and Principle V. B. 3.
$\tau \epsilon \dot{\chi} \chi \epsilon \sigma \iota$ ma $\mu \phi a^{\prime} \nu \omega \nu$ : the Instrumental of means and cir-
cumstance, and the Locative like our 'glittering in their weapons,' are here possible.

With verbs meaning to be with, to follow, to join, to agree with, to be like, and adjectives meaning 'equal,' 'like,' the Dative might correspond to the Dative frequently found in Latin, and in English also: 'to be a companion,' 'to be a follower' (though here we use the Genitive rather than the Dative of the possessor), 'to join oneself to,' 'to agree to,' 'to be like unto,' 'like to,' 'equal to,' the Instrumental might correspond to the English 'with' and Sanskrit Instrumentals, and Latin phrases with cum, and Greek phrases with $\sigma \dot{v} \nu$ and ${ }^{a} \mu a$. The Locative might have been occasionally possible with plurals, originally meaning 'among,' and then extended to singulars = 'with,' or it may have extended over a Datival meaning (v. Principle V. B. 3, and the Cases).

With verbs meaning 'to trust' the Dative would correspond to the Latin Dative and our 'to:' the Locative to the Latin construction with 'in,' our construction 'to trust in,' and the Sanskrit Locative: the Instrumental might once have expressed the means or circumstance of the confidence.

With verbs meaning 'to be pleased' the Instrumental might have corresponded to the Sanskrit Instrumental, and our ' to be pleased with,' and have expressed the circumstance or means; the Locative might have corresponded to the Sanskrit Locative, and our 'pleased at, or about:' for the Dative cp. סódourıy above.

The 'Dative' of the 'way by which' may be possibly Instrumental of circumstance (perhaps hardly of means) as in Sanskrit, and (possibly) cp. our 'by,' and also Locative like our 'in,' 'on:' for the Dative cp. ки́ $\mu a \sigma \iota$ above.
$\dot{v} \pi \epsilon \delta \dot{\delta} \xi \xi a \tau 0$ кó入 $\pi \omega$ is possibly Locative like our 'in,' expressing 'place where,' Instrumental like our 'with,' expressing the circumstance, and Dative like our sinto $\left.\begin{array}{c}\text { unto }\end{array}\right\}$,' expressing 'place to which,' as it does in Sanskrit frequently.

With verbs of 'buying', the Iustrumental might have corresponded to the Sanskrit Instrumental, and to our 'with;' the Locative to the Latin Locative forms magnī, etc., and to
our 'at;' we use also a Dative 'to buy for (6d.,' perhaps partly on the analogy of 'to sell for, i.e. in order to obtain, $6 d$.' (?) or 'for' $=$ 'in exchange for:' could Greek have possibly had a construction like this? or cp. above on the Dative expressing 'cause:' v. further the Cases.

With verbs of 'abounding' the Instrumental might have corresponded to the Sanskrit, aud to our 'with,' and have expressed the circumstance: the Locative to our 'in' and to the Latin Locative form scen in pauper aquae.
 our ' in'-cp. 'to sleep in slumber:' the Instrumental to our 'with,' expressing circumstance.

## The Locatival Dative: v. further the Cases, Chapter IV.

$\pi \epsilon \delta i \varphi, \chi \theta$ ovi : the Locative would correspond to the Latin Locative, e.g. humī, the Sanskrit Locative, and our 'on,' etc.: the Instrumental would express circumstance, and might have been used, as in Sanskrit, in phrases like they ran on the plain:' for the Dative cp. ұaцaí, and кúpaбь $\pi \epsilon \prime \mu \pi \epsilon$ above, and Principle V. B. 3.
${ }^{\epsilon} \rho \iota \delta \iota \xi v \nu \epsilon \in \eta \kappa є \mu a ́ \chi \epsilon \sigma \theta a \iota-A s$ to ${ }^{\ell} \rho \iota \delta \iota$, is there here a trace of a Dative like that of English, Latin, and Sanskrit, and the Greek Infinitive in -al, meaning 'he brought them together for strife, for a struggle' - the Locative might correspond to our 'in strife,' and both Locative and Instrumental to the Sanskrit forms which so often developed into adverbs.

Of the parts of a thing: $\omega^{\prime \prime} \mu \omega$ and $\omega^{\prime \prime} \mu \circ \sigma \sigma$, , кє $\phi a \lambda \hat{\eta}, \chi \rho \circ i \bar{\prime}$,
 $\mu v \chi \hat{Q}$ " $A \rho \gamma \epsilon o s$, etc.: these would, as Locatives, roughly correspond to our 'in,' 'at,' and to certain Locative forms like animi in Latin, and also some Sanskrit Locatives: the Instrumentals might correspond to certain Instrumentals in Sanskrit, and possible Instrumentals (like animō) in Latin, and to our 'with,' 'with respect to:' they would express generally the circumstance rather than the means, perhaps. For a Dative with Locatival meaning cp. above ( $\pi \epsilon \delta i(\omega)$ and Principle V. B. 3.

Of the part with which a person does a thing: e.g., $\chi$ € $\rho \sigma i \mathrm{y}$ aipô. Here the Locative corresponds to some Sanskrit
 inuia: we see a possible extension of the Locative to express something like means from a Greek phrase like $\bar{\epsilon} \nu \dot{o} \phi \theta a \lambda \mu o i ̂ \sigma \iota \nu$ $i \delta \dot{\epsilon} \sigma \theta a t$, perhaps partly due to the analogy of èvi $\phi \rho \in \sigma i$ ' within their heart.' For Instrumental and Dative cp. кó $\lambda \pi \varphi$ (above).
 'leaning on-to a pillar,' like the Latin Dative; an original Instrumental might have expressed the circumstance (possibly the means) of leaning: and an original Locative the 'place where,' like our 'on' and the Sanskrit Locative-cp. also haerere in Latin with its various constructions.

Oépeï: as Locative it would correspond to the Sanskrit, Latin, and English Locative of time when: an original Instrumental of attendant circumstance (?) is scen occasionally in Sanskrit, corresponding more or less to our 'by,' c.g. ' by day.'
$\pi \epsilon \delta i(\omega \pi \epsilon \in \sigma \epsilon$ : as Locative it would be like our 'fell on the ground,' and the Sanskrit Locative, explained above. As Dative it would be like our 'fell to the ground' and the Sanskrit Dative ; it is also found in Zend.
$\pi \rho о к а \lambda$ е́ $\sigma \sigma а т о$ Ха́ $\rho \mu \eta$ : a Locative might have been used like our 'in battle,' or, as in the above instance, and like the Sanskrit Locative and the Latin Infinitive, which is probably partly a Locative in form, 'to battle,' cp. egit visere in Horace : an Instrumental of circumstance is found in Sanskrit rarely in this construction : a I)ative 'to,' like the English and Sanskrit, is also possible.
$\pi$ áp’ є́ $\mu о i ́ \gamma \epsilon \kappa$ каì "' $\lambda \lambda о \iota$ : the Locative might have meant 'with me,' as in Sanskrit, and 'at my side;' the Instrwmental 'with me' as in Sanskrit and English; the Dative might have been a Possessive Dative, 'I have others,' as in English and Latin.
 in Latin and Sanskrit; and the Instrumental, as in English ' with' = 'anong' and in Sanskrit; and the Dative, 'for them,' like the Latin Dative, are all possible.
 possible Dative cp. the Latin Dative of the person judging = 'for,' 'in the sight of:' for the Locative cp. the Sanskrit Loca-
tive, and our 'among:' and for the Instrumental cp. our 'with' or 'anong' with adjectives lenoting eminence.

A more thorough knowledge of Sanskrit syntax, and of the syntax of other Indo-European languages, than I possess, would probably improve this criticism in almost all its instances.

Before proceeding to the Latin 'Ablative,' I must, to avoid any misapprehension, repeat what I have already said: the instances here suggested are only suggested as possible in the Greek or Latin of some one period or another, and in some constructions, not necessarily in all. They are suggested not as alternatives but as additional origins; and as not necessarily giving the ultimate as well as the original meanings of the constructions: (v. Prineiple I. of the Grammar).

## Allen and Greenough, p. 245 foll.: v. further Chapter

 IV.The table has already been given : it is only partially criticised here, and many of the suggestions made here are repeated from the Grammar. N.B. The views of A. and G. seem exactly those of Delbrück.

1. Ablative (from): for fuller details v. the Cases.
2. Of Separation, Privation, and Want.

With words of separation Sanskrit uses an Instrumental, on the analogy of the case with words of 'joining,' etc. ep. English 'parted with' (v. Principle V. A. 2): with words of 'privation' an Instrumental might have been an extension from the case with verbs of 'presenting,' etc., i.e. just as with the words of separation-cp. English 'deprive him:' with words of want the Instrumental might have originally expressed 'with respect to,' or might also have been an extension from an Instrumental like that with words of 'abmondance' in Sanskrit, and ep. English 'abounding with,' 'teeming with:' we also use a Loeative 'wanting', deficient, poor in,' and Latin used a Locative form, in two declensions certainly, with words expressing abmudance and want, and possibly in the other declensions also-e.g. pauper ayuae, auxili egens, ope egens. It is to be noticed that with all these verbs, etc. the idea of separation lies
in the governing words, and may be, but need not necessarily be, repeated (?) in the case-suffix-cp. 'he departed from there,' and 'he departed from thence.' In a phrase like egeo medecinā possibly no 'from' meaning is present now, but an original meaning of 'I am in want having-no-medicine' is possible, especially if the analogy of 'I am without-medicine' be taken into account: v. Principle XIII. 1.
2. Of Source (participles of origin, etc.).

The 'from' notion needs no explanation: the ablative is used in every language. In a few constructions like 'a voice in heaven,' 'the river starts in Phrygia,' a Locative might possibly have been used: and an Instrumental (or Locative) where the source was also the meaus, etc.

Where the source developes into material, the Ablative origin is clear, and the Instrunental is also sometimes possible because the material is generally also the quality, which is Instrumental in Sanskrit: as to the Locative in Eughish we occasionally use 'in' to express the material and quality, e.g. 'a table, a statue, in marble,' 'a talent in gold.' In a phrase like quid lioc homine faciatis? the Latin equivalent with de 'what shall we make out of him' suggests an ablative origin: Sanskrit and our 'what will he do with it?' suggests an Instrumental also ; the Latin equivalent with in 'in the case of this man' suggests a Locative origin also.
3. Of Cause (with gaudeo, dignus, etc.).

How can the case with dignus be put down to 'cause'? As to the case with verbs of rejoicing, etc. the ablative might have expressel the source 'as the outcome of something I rejoice:' the Locative possibly the sphere or cause; it is used in Sanskrit and in English 'in,' 'at,' 'about,' e.g. 'I am glad about that.' The Instrumental might originally have expressed that which was the means of making one happy or a circumstance: in Sanskrit we find it in a sentence like 'we pleased him with sacrifices,' where an extension to 'he was pleased with our sacrifices' is easy.

It is to be observed that the ideas of canse and instrument often meet on neutral ground, as in Sanskrit. The Locative of cause is especially frequent in the Locative $\Lambda$ bsolute, and cp. 'in my excessive joy I nearly went mad.'

## 4. Of Agent (with ab after Passives).

The Ablative might have expressed the source from which an action proceeded, and the ab might have been used e.g. to bring out this idea more strongly: the Instrumental is found in Sanskrit with the meaning of our 'by,' and to the Instrumental an ab might have been added (?) to mark the agent, i.e. the source and instrument in one; for the possible development of a Locative, especially with plurals, ep. 'that thy ways might be known among men' 'discovered among the Indian tribes' etc.

5. Of comparison ('than').

Sanskrit uses an ablative, meaning originally, e.g. ' A is greater starting from $B$, taking $B$ as our standard of comparison,' or 'A is greater and not B,' like ' A is different and not $B$, different from $B$, other and not $B$, other tham $B$ :' v. Principle I. 2. Sanskrit also (rarely) uses an Instrumental, probably chiefly on the analogy of ' $A$ is not equal with $B$,' etc. A Locative e.g. extended by analogy from 'A is greatest among them' to 'A is greater among them' is not absolutely impossible in the case of plurals, and lience by analogy, with singulars: cp. also 'superior, or lord, among them:' v. the Cases.

Instramental Ablative (with): for further details v. the C'ases.

## 1. Of Manner, Means, and Instrument.

These ideas run into one another. All might have been denoted by Instrumentals, as in Sanskrit, expressing the means and circumstance, and roughly corresponding to our 'by,' 'with:' the Ablative of the Means and Instrument would originally have expressed that as the outcome of which something is done, but is, in Sanskrit, occasionally extended to Means and Instrument. The Ablative of manner might have developed from e.g. ex more 'after the custom or manner,' becoming eqnivalent in meaning to 'in the manner,' and from e.g. ex aequo, 'according to equality' becoming equivalent to 'equal-ly;' we find many equivalents to Ablatives expressing manner in Sanskrit and Greek, e.g. $\epsilon \xi{ }^{\prime}$ 'ooov, and in Latin many analogical extensions took place, like aliquà ex parte: (v. further
under the Ablative for another origin of this extension). The Locative expresses these ideas occasionally in Sanskrit, and cp. 'in haste,' 'he sharpened the razor upon the strop,' etc.
2. Of Accompaniment (with cum).

Sanskrit also used Locatives, beside Instrumentals, originating probably with plurals, just as 'among them' = 'with them,' but extended to singulars also: to both cases cum might have been added (?) to strengthen and define the meaning.
3. Of objects of the deponents utor, etc.

With some words denoting employment Sanskrit uses an Instrumental of circumstance (and possibly means) corresponding roughly to 'employ onesclf (have employment) with,' and also a Locative (corresponding to our prepositions in English) with words meaning ' occupied in,' 'engaged in,' 'intent on,' perhaps originally giving the sphere of employment; an Ablative might have expressed the 'material' of the employment, v . above.

With verbs like vescor the Ablative might have expressed originally the source (like to 'feed off' in English), the Instrumental the circumstance of the meal, as in Sanskrit: the Locative might have corresponded to our 'feed on.'

## 4. Of Degree of Difference.

The Instrumental is found in Sanskrit and corresponds more or less to our 'by:' it expressed the degree of difference perhaps rather as a circumstance than as a means: i.e. in 'A is taller than B by a foot,' a foot might possibly have been regarded as the means of making $A$ taller than $B$, but it was probably regarded as an attendant circumstance of the superior height: it must be remembered that the Locative also expressed attendant circumstance, and may possibly have expressed the point at which the superiority ended, the limit of superiority, though in English we have no exact equivalent, I think.
5. Of Quality (with adjectives) :

The Instrumental is thus used regularly in Sanskrit, corresponding more or less to our 'with:' where the Quality is also the Material, Greek uses an equivalent to our Ablative 'out of,' 'from,' e.g. $\bar{\epsilon} \xi$ ú $\lambda \eta \rho$, 'out of wool,' and Latin also, templum de marmore ponan. We occasionally use a Locative in such
instances, as shown under 'source:' and v. also under 'accompaniment' (above). It is possible that Latin may have analogically extended Ablatives (and some Locatives) from instances where they expressed both the source and quality to instances where they expressed the quality alone, as, e.g. in 'a man with a long beard.'

## 6. Of Price and Exchange :

In English we often use the Locative, and Latin uses a Locative form in the a- and o- declension and possibly in the consonant-declension also: Greck occasionally uses a form which must be Locative in the consonant-declension, and which may possibly be Locative in the a- declension: in Sanskrit the Instrumental was the regular case: if it did originally denote price as the means of obtaining something, then it must have begun with 'I buy by means of $6 d$. .' and have been extended to 'I sell at $6 d$. .' and 'I value at $6 d$. .' by analogy, just as 'I buy for 6d.' was perhaps partly an analogical extension from 'I sell for', i.e. in order to get, 6d.' (when once this latter form had come to mean not so much 'in order to get,' as something like 'at' the price fixed on the article, and at which it was valned) : the Ablative might have been used with verbs of 'buying' chicfly, perhaps meaning 'I buy and part with 6d.,' and so might have been analogically extended, or it might, not inconceivably, have meant ' I buy as the result of Gd.,' and cp. the Ablative of Means and Instrmment in Sanskrit: Greek 'Genitives' may be referred possibly to Ablatives as well as to Genitives, so far as the meaning is concerned: v. Principle III. 2 and under the Cases.

## 7. Specification:

In English we use the Locative, c.g. 'in mind,' 'at heart,' and Latin used a Locative form in the o- declension and possibly in the consonant-declension, and Sanskrit occasionally uses a Locative = 'in mind,' etc., perhaps originally specifying by giving the 'sphere' or 'place where.' Greek occasionally has a Locative form, e.g. $\phi \rho \in \nu i$ : Sanskrit uses the Instrumental, corresponding more or less to our 'with,' 'with respect to,' and Latin sometimes uses a form which may possibly be Instru-
mental. An Ablative is not impossible, if we consider the Plautine phrases ab animo, etc.: perhaps one origin of them was to express 'on the side of' from the point of view not of one's own position but of the position of the absent thing : just as it is far from here to Rome and from Rome to here ; we can compare also the phrase ex aliqua parte, ete., and the numerous equivalents to original ablatives expressing manner, etc. as their present meaning : v. under the Ablative, and Principle III. 1.
3. Locative Ablative (in, at, on): v. further in Chapter IV.

1. Of Place where:

Occasionally the Place where is also the road by which, when it was often expressed by the Instrumental, probably of attendant circumstance, in Sanskrit, and in English we say 'by the road,' 'to travel by sea:' with this we may perhaps compare the Sanskrit and English Instrumental beside the Locative to express, e.g. 'he decketh himself with light,' and 'in light.' Analogical extensions are possible. The Locative corresponded to the Sanskrit, English, Greek, and Latin Locative forms regularly found, and needs no explanation. The Ablative is found in certain phrases like 'a voice from heaven,' which is also 'a voice in heaven,' and 'the river starts from, and in, Phrygia,' i.e. where the 'place where' is also the source: and if the forms in -tos (e.g. évóós 'within' intus, Sanskrit adverbials in-tas) are really ablatives in origin, then we should see Analogical extensions of the ablative to express 'place where:' but they may possibly be Genitives ( v . the note at the end of this Appendix, and under the Ablative).
2. Idiomatic Expressions:
pendemus animis has been already treated of under 'Specification.'

With verbs like gloriari, confidere, consistere, the same suggestions which were given under 'Cause' will apply, more or less.

With sto, e.g. mediis consiliis stare, the Ablative might have originally expressed that standard in accordance with which they must act, or that they must stand on the side of the moderate policy: the Instrumental might have hem a kind of Instru-
mental of accompaniment 'to stand with,' and the Locative 'to remain firm at, in,' is quite clear.
3. Of Time and Circumstance :
'Time when' is in Sanskrit expressed by the Locative, corresponding to our 'at,' 'on,' and occasionally by the Instrumental, like our ' by:' a possible Ablative origin is suggested e.g. by the construction with de, e.g. epulari coeperunt de die, 'they began to feast beginning at day-time,' 'starting from day-time,' developing into 'by day.' 'Time within which' is in Sanskrit expressed by the Locative, of sphere originally, and by the Ablative: e.g. 'he will have come after three days (at any rate)' might, and perhaps does in Sanskrit, develope into meaning 'he will have come within three days.' The Instrumental occasionally expresses 'time throughout which' in Sanskrit, and ep. Latin per noctem, but, in a negative sentence especially, this idea cannot be altogether separated from 'time within which,' e.g. in 'she does not sleep by day:' the Locative also occasionally expresses 'time throughout which' in Sanskrit. 'Time after which' is expressed by an ablative as giving the starting-point, e.g. 'ten years from to-day I will return' means 'ten years after to-day,' ep. є่к тov̂ठє 'henceforth,' and the Imperatival ending $-\tau \omega(\delta)$, tō $(\mathrm{d})$, originally meaning 'henceforth:' this is also expressed by the Locative in Sanskrit, perhaps just as 'hereupon,' 'thereat' mean 'after this,' and perhaps also because 'he will have come within three days' $=$ 'he will have come after three days:' in certain expressions the Instrumental is found, e.g. 'Grammar is learnt in or after 12 years' may be an Instrumental of attendant circumstance, or possibly of means 'by means of 12 years' learning:' v. further the Cases.

Circumstance is expressed in Sanskrit by the Locative corresponding more or less to our 'at,' 'on,' 'about,' etc.; by the Instrumental corresponding more or less to our 'with,' etc. and expressing accompanying circumstance; by the Ablative where the circumstance is also the source and cause of the action, and in some other constructions.
4. Ablative Absolute :
(Allen and Greenough do not point out the exact advantage of calling forms like illo donō acceptio Locatives only!)

Originally, it seems that the Absolute construction consisted of some case of a noun, used in one of its ordinary senses, with a participle added: we can actually trace some of the history of the Genitive Absolute in Sauskrit, for in Vedic we find a noun depending in form (perhaps not altogether in meaning) on a substantive idea, with a participle attached: then the meaning alters without the form altering, just as 'at-the-sun-shining-the-heat is great' might come to mean 'at-the-sum-shining the-heat-is-great' and hence, by analogical extension, 'at the sun shining it is hot:' it is unlike the Greek 'Genitive' Absolute in being rarely used except with a person in the Genitive. Similarly, though besides the Genitive in Sanskrit we only find a Locative (originally meaning 'in,' 'at,' etc.) and an Instrumental (originally meaning 'with,' etc.) with a participle which was originally attached to them, but soon changed its meaning in many instances to, e.g. 'with 'at $\}$ the shining of the sun,' yet Latin, to express cause or source of action unmistakeably, may have used an Ablative also with a participle attached, meaning 'as the outcome of, as the result of, the sun shining it is hot:' and hence analogical extension to any sort of 'Ablative Absolute' is possible. Similarly, to denote 'time after which' Latin rarely used a construction with ab, e.g. ab urbe, and a participle, e.g. conditā : v. further the Cases.

If the instances under the different headings in Allen and Greenough be examined, many more examples will be found where, whatever may be the ultimate meaning and form, we cannot exclude the possibility of two or even all three origins ${ }^{1}$,
${ }^{1}$ One of the best illustrations is meã refert: meā ré fert might originally, so far as the form of rē goes, have possibly been 'It tends or goes' (cp. Greek $\phi \epsilon ́ \rho \epsilon \iota$ кat' oủ $\rho o \nu$ ) (a) Ablative: 'according to my interests' (cp. ex meā sententiā), 'on the side of my interests' (cp. a te stat 'it favours you' etc.); (b) Instrumental: 'with my interests;' (c) Locative: 'in my interests.'

Similarly interest 'there is something between, there is a difference,' (a) Ablative: 'according to my affairs, taking my affairs as the point from which we regard things,' 'on the side of my affairs' (v. 'Specification,' above); (b) Instrumental: 'with respect to my interests;' (c) Locative 'in, in the sphere of, my interests.'

The ultimate difference may have been that, in connexion with interest and ré, meà acquired a clear force, and so the expression of rē became un-
especially if we allow, as we must, for analogical extensions. Of course it is to be regretted that such neat and compact divisions of the uses of the Greek 'Dative ' and Latin 'Ablative ' are not warranted either by the forms of the Cases in Greek and Latin, or by the meanings in cognate languages; it is to be regretted that these temptingly simple-looking results must give way to shadowy possibilities, and that the treatment of the other compound or syncretistic parts of speech must be somewhat similar: it must confine itself to suggesting probable developments and must not map out the development of centuries as if all the evidence of it were in our hands. But is there not a brighter side? Does not the shadowy treatment reconcile some otherwise irreconcileable vieus by saying that both are equally possible, and does it not give the schoolboy some chance of working out somethiny for limself, instead of learning everything by heart? Of course, as I have already said, I quite realise that probably the developments given here did not all actually take place in the way described: it is very likely that many of the neutral-ground uses of the three cases were partly due to extensions from plurals to singulars and vice versa, and

1. Proportional analogy of forms: e.g. supposing that the ultimate forms of Instrumental, Locative, and Ablative were all $\bar{i}$ in the $i$-declension, then in this $i$-declension the form i would be the same whether the meaning was Ablative, Locative, or Instrumental: bence the tendency would be for the form $\overrightarrow{1}$ to be the same in the u-declension, and the form $\breve{e}$ in the consonant-declension, whether the meaning vas Ablative, Locative, or Instrumental :
2. Proportional analogy of meanings: e.g. supposing that, in seven constructions out of ten of those mentioned above, two or all three case-forms would convey practically the same meaning, and could be used indifferently, the tendency
nceessary: cp. calida (aqua), (rermm) repetundarum, $\tau \hat{\eta} \dot{\eta} \sigma \tau \epsilon \rho a i q(i \dot{\eta} \mu \epsilon \rho q)$; while, the same might possibly have happened to meā ree fert, had not rē become, as it were, glued to fert by constant association. For the alternation of 'Genitive' and Adjective in Caesaris and meā, epp. the Latin for 'my accuser,' and the Greek for 'the might of Heracles.'
would be to use them indifferently in the other three constructions also: i.e. the three cases would often have the same meanings, and so each case might use these same meanings as stepping-stones on to the territories of the other cases, until the territories of the three cases became (in certain declensions) co-extensive.

As to the case-forms which survive in Sanskrit, Greek, and Latin, I suppose that Brugmann's Table (on p. 736 of Vol. II. 2 of the Grundriss) represents the Philology of the New School 'up to date.' This table I shall here criticise in order to suggest, by the way, what the surviving forms in Greek and Latin may possibly be.

I begin with a general criticism of the method.
The first question is: What is Brugmann's method of classification, and, if he has only one, is it the right one? (To put the question concretely, ou what principle does Brugmann classify Sanskrit ávā, ávāu as Locatives of an i-stem, and matí as Instrumental of an i-stem?) So far as I can see, ( $\alpha$ ) in regard to Sanskrit, the Sanskrit Grammarians' classifications rested on a compromise between present meanings and present forms, and Brugmann has followed them almost implicitly: (b) in regard to Greek and Latin, the Grammarians' classifications rest on a (far more weird) compromise between present meanings and present forms, and Brugmann has followed them, on the whole, but has paid considerably more attention to forms than they did.

Where the present meanings seem to Grammarians to-day, or seemed to Grammarians (in comparatively modern times) to be consistent with the present form, suggestions may perhaps be called 'probable' or 'highly probable;' where the present memings seem to be incompatible with the present form, can we admit the present meaning as our basis of classification, and ignore the present form? j.e. are we so absolutely certain that we know exactly where each case stopped developing its meanings, and that we know exactly what all its meanings were (and that no single one of them ë $\lambda$ a $\theta \in \quad \gamma \in \prime o ́ \mu \epsilon \nu o \nu)$, that we can confidently exclude, on the
strength of this knowledge of meanings, a Phonctic development which has strong support? e.g. can we be sure that the Locative conld never have come to express the case-meanings which matí shows, and so sure that we can confidently deny that matí is Locative in form (stem máti + locative $\mathrm{i} \rightarrow$ matī)? I think that, if we look at Appendix II, and at the Cases, and at the criticism of Allen and Greenough and Monro (above), we cannot admit the present meaning as our basis of classification, and ignore what Phonetics can tell us about the present form : as a general rule, we must trust to forms alone as our basis, and must label our results as some of the probabilities or possibilities.' I now sum up the main objections to Brugmann's Table : all of them I have tried to illustrate below.

1. It does not classify strictly by forms: once off this ground we are on the ground of the Old School : e.g., suppose regeres was really sigmatic aorist subjunctive in form (therefore in meaning), can we for one moment flatter ourselves that we have explained its meaming adequately if we have taken as our basis the meaning of an imperfect subjunctive or optative? A surprising number of people fail to realise that, supposing regeres really was nothing but aorist subjunctive, then it had the meanings of an aorist suljunctive always, however wide and comprehensive those meanings might have been. If we take the present meaning as the basis, then in some consecutive sentences with ut we must smrely, to be consistent, classify regeres as aorist indicative, and $\pi \epsilon \delta i o \iota o$ as Locative and Instrumental! which is absurd.
2. It does not allow enough for Anulogy, especially ( 1 ) Proportioncul analogy (v. end of Appentix V. for the possibility of $\lambda o ́ \gamma \omega$ being sometimes as much Locative in form as $\chi \omega \rho a$ ), and (b) Contamination. And so later growths are put down as Indo-Emropean.
3. It ignores 'Heteroclisis:' i.e. an original rich and free growth, e.g. three stems, which ultimately left one stem supreme (on the whole) but one or more isolated forms from another stem surviving or supreme in one or more cases. The same theory of 'Heteroclisis' will alone explain many verbal forma-
tions: e.g. of two or three verbal suffixes one is left supreme, except in some tense or mood, where another verbal suffix is left supreme.
4. It ignores some possible Syncretisms or 'Amalgamations' of Cases: now Vedic Sanskrit is certainly old, but how much older than Homer is a great question: I think that History, Geography, and Archaeology will tell us that the subjectmatter is very very old: and the same may be said of some of the forms and constructions. In Homer we find 'amalgamations' (i.e. wherever these 'amalgamations' are not really relics of an original unity): e.g. probably, roughly speaking,
(a) The Subjunctive and Optative seem to have the same meaning in not a few constructions:
(b) 'The Ablative and Genitive have partially 'amalgamated':
(c) The Instrumental, Dative, and Locative are partially 'amalgamated:' (especially the Dative and Locative Infinitives except for distinctions of Voice):

In Latin we probably find a more or less close 'amalgamation' of
(a) Aorist and Perfect:
(b) Subjunctive and Optative:
(c) Ablative, Locative, and Instrumental:
(d) Genitive and Locative:
(e) Infinitives (except for the Voice distinctions): perhaps both Dative and Loeative and Instrumental etc.

In Sanskrit we find, again and again, the following forms with almost or quite identical meanings in some constructions:
(a) Subjunctive und Optutive (especially):
(b) Aorist, Imperfect, and Perfect, and even Present:
(c) Locative and Instrumental:
(d) Locative and Dative (especially in the Intinitive):
(e) Locative and Genitive:
( $f$ ) Genitive and Ablative: and so on, with any two ‘oblique' cases.

Now why should not these identities have affected the forms in pre-historic Sanskrit, as well as in pre-historic Greek and Latin? why should they not occasionally have produced either
A. Contamination, or the blending of two forms into one form (made up of elements of both), in one declension or more, owing to a partial identity of meaning: or
B. Disappearance of one form, because its meanings could be expressed by some other form or forms: one surviving form would have some or all of its own old meanings and also some or all of the meanings of the form which, except perhaps for isolated constructions, disappeared: or
C. Differentiation: i.e. diffcrences of meaning not due to original differences of meaning so much as to what we may ahnost call 'accident:' e.g. suppose a form A denotes (a) + (b), and a form $B$ denotes (a) + (b) also: suppose that in the majority of A's constructions it happened, accidentally, that the meaning (b) predominated, and, in most of B's constructions, the meaning (a). Then it may have come about that A was regarded as the proper form to express (b), and B to express (a). (Cp. one possible history of the Genders.)
5. It often ignores the possible unity of formation of the majority of case-terminations: it practically grants a unity to the Accusative, but gives the other oblique cases in some one declensiom forms which they do not ostensibly possess in other declensions, but which some other case does possess in other declensions and perhaps in the very declension in question: (e.g. it gives to case A in one declension a form which in other declensions case A does not possess, but case B does possess). And this, too, in spite of the fact that these two cases (e.g. A and B) in other declensions have many meanings in common.

The harm of all this absolutism is that one naturally looks to Brugmam's Table or 'Abstract' for guidance - he is so great a Philologist that ninety-nine out of a hundred rely implicitly on his results. And so, looking at the criticism of Allen and Greenongh and of Monro (above) we see that it is possible that the sphere of the Instrumental, Genitive, etc. has been terribly
exaggerated, becanse what are here classed as Instrumentals and Genitives are in reality Locatives in form, and therefore Locatives in meaning. As to the idea, so often and often assumed as a fact, that whatever does not express ' place where, time when, absolute construction,' camnot be Locative in spite of its being probably sometimes or always Locative in form, it is ridiculous when we look at the Locative in Sanskrit, and probably in Greek and Latin, and at the enormous ground covered by prepositional equivalents in English, Greek, and Latin. The assumption ignores Principles I. IV. V.

Another idea frequently assumed to be a fact is that the very great majority of constructions which were created conveyed a new meaning, i.e. a meaning which was not conveyed by any form at all before their creation. As a matter of fact one grand feature of the growth of syntax is that new forms and constructions are not always created because they are absolutely required, but are created unconsciously and unavoidably as it were: to suppose that, when once a meaning was conveyed adequately by some one form, every one avoided expressing it by any other form, is almost as ridiculous as to suppose that a traveller coming from one direction would avoid stepping upon the same side of the road as another traveller who had come from a different direction. A form may be used to express a meaning already adequately expressed by some other form, from a different or scarcely different point of view: e.g. 'parted from' is clear and seems to give all the essential maning: nevertheless from another origin, and with a rather different shade of colouring, we also use 'parted with,' perhaps chiefly because 'parted' may sometimes be, in thouglit, nearer to ' not mited,' ' no longer united.' And v. the criticism of Allen and Greenough and Monro (above), and Appendix II., and the Cases, for occasional possibilities like the following: 'place from which' $\rightarrow$ 'place at which ' 'place to which ' (v. Ablative); 'place or person to which' $\rightarrow$ 'place or person from which or whom' 'place at which ' (v. Dative); 'place at which' $\rightarrow$ 'place from which' 'place to which' (v. Locative). These possible Local developments show startling changes of meaning, and one more possibility will prevent us from trying to classify by meanings
and not by forms, where they seem to us to be incompatible. In Greek or Latin it is possible that every case may be used in one construction or more with the meaning of a Nominative: e.g.

Vocative: quibus, Hector, ab oris exspectate) $\left.\begin{array}{r}\text { us }\end{array}\right\}$ venis? (v. under Vocative).

Accusative: *eligur aliquos $\underset{i}{ }\}$ (v. mider Voices).

tive, and cp. ' whom say ye that I am?')
Genitive: 'I $\left.\begin{array}{r}i o o \\ \nu\end{array}\right\} \pi \tau o \lambda i \epsilon \theta \rho o \nu$ (v. under Genitive).
Dative: dulce est morī $\underset{\mathrm{s}}{ } \int_{\text {(v. Principle I. 1) }}$.
Locative and Instrumental: dulce est concipere (v. Principle I. 1). dulcis est conceptio.
Locative and Ablative: difficile est conceptī (v. id.). difficilis est conceptio.
Ablatival: ex piscibus\}

$$
\left.\begin{array}{c}
\text { iscibus } \\
\text { pisces }
\end{array}\right\} \text { quidam. }
$$

ln the following criticism it is very very far from my intention to suggest anything as certain: it must be clearly understood that
(1) I only suggest possibilities:
(2) I only pick ont a few instances ont of many, from three languages out of many, and only from the stems ending in -0-, - $\overline{-1}-$, -i-, - -1-, consonant.
(3) I do not consider the stem-variation: so much levelling must have already taken place before the times of which we have evidence, so that it is possible that I have omitted many important points-e.g. matpí may really be not merely Locative, for one might expect the Locative furm to be maté $\ell$, but a
contamination of Locative $\pi a \tau \epsilon \rho \iota$ with Instrumental $\pi a \tau \rho a$ and Dative $\pi \alpha \tau \rho a \iota$ : so that the stem of $\pi a \tau \rho \iota$ would be mainly from the Instrumental and Dative, and the case-termination from the Locative. I fully realise the possibility.
(4) The Nommative, Vocative, and Accusative are not considered here: N.B. if Sanskrit me, te, etc. are classified as Genitives why are they not also classificd as Accusatives? Even here Brugmanu's Table is open to something more than a query.
(5) The pronominal declension is not considered.
(6) Brugmann's results are put in Italies; I. E. = IndoEuropean: S. = Sanskrit: G. = Greek: L. = Latin.
(7) The distinction between $i$ and $i$, and between u and $u$ is not denoted here. I here follow the Latin method, rather than the usual method of the New school. To decide between original i and i is not always so easy as the New School seem to think: e.g. Genitive osio is far from being the only certain form: might not the form have sometimes been osio? ep. silu(or un)a.
(8) The analytical method is adopted for the sake of convenience, although, in reality, cases were not as a general rule formed by adding endings to stems, but by analogy (especially proportional analogy) from some early formations.
(9) Often definite words (e.g. plus and turris) are chosen as types of a class.
(10) I am only considering Brugmann's 'Table, apart from the body of his work: I do this because the Table is the only part of the book which most people would naturally refer to if they wanted to classify a form.

## o-stems:

Genitive:
I. E.: osio, esio, ei, oi (?) ; S. asya, (and me); G. oוo, ov, $\omega$, Thessalian o七, Greek $\mu$ o七; L. $\bar{\imath}$ and $m \bar{\imath}$.
I. E. osio, esio ; S. asya; G. ov $\quad$. $\rightarrow o \iota o \rightarrow o v$ look like Genitives (formed by adding the Genitival -s to the stem) +
the adjectival suffix io (which is so common in Sanskrit and Greek) : possibly this double Genitival formation was not IndoEuropean at all, but originally confined to one or two dialects, e.g. Sanskrit and Greek, whereas other dialects formed the Genitive, in this declension as in other declensions, by adding es, os, or s; if this was so, then this Genitive would perhaps be like the future in -bo in Italic and Celtic, a dialectic variety.

As to Greek oo $\rightarrow$ Attic $\omega$ at a comparatively late stage of development, it is very donbtful : early oo and Doric oo might $\rightarrow \omega$, but would not later oo be expected to $\rightarrow o v$, just as later $\epsilon o$ (from esio $\rightarrow$ eio) might have become ou? For one possible explanation of $\omega \mathrm{v}$. the Ablative (below).

Might we not suggest a possible Genitive formed by adding os, es, or s to the stem: e.g. o + os $\rightarrow$ Greek $\omega \varsigma$, e + es $\rightarrow$ Greek $\eta \varsigma, o+$ es $\rightarrow$ Greek ovs, Italic ois (?) $\rightarrow$ eis (Italic), (even if some of these forms rarely or never sturvived, being superseded by other formations) ?
I.E. ei, oi ; S. me ; G. $\mu \circ \iota$ ('Thessalian o七) ; L. ì:

Why give the Genitive here a form which it need not have in any other declension and which the Locative regularly has both in this and in other declensions? The Locative can extend over quite enough Genitive meanings to make 'amalgamation' (i.e. a Locative form with some early genitive meanings and some typically Locatival meanings) possible here: (v. under Cases, and Appendix II.).

Here again the Table postulates as I. E. what may have been due to amalgamation in one or more languages after I. E. times: thus Italic eis is possibly from stem o (or stem e), + es ( $\rightarrow$ is as in the consonant-cleclension, the analogy of which the 0 -stems perhaps followed) $\rightarrow$ eis : or it may be a contamination of Locative oi or ei and Genitive os or es or s.

## Ablative:

I.E. $\bar{o} d, \bar{e} d ; S . \bar{u} d ; G . \hat{\omega}=u n d e ; L . \bar{o}(d), \bar{e}(d)$.
I.E. $o+e d$ and $e+o d$ are not considered: might they not possilily have $\rightarrow$ Creek ov $\delta, \rightarrow$ ovs before dentals, ov otherwise : so Homeric ov might sometimes be Ablatival in origin beside

Genitival ooo. $0+0 \mathrm{~d}$ might $\rightarrow$ Greek $\omega \delta \rightarrow \omega \varsigma$ before dentals, $\omega$ otherwise: (cp. oút $\tau \varsigma$ beside oût $\omega$, and perlaps our 'toward' $\rightarrow$ 'towards' before dentals: though these original distinctions between $\omega, \omega \varsigma, d, d s$, may have been obscured in course of time). In Latin $0+o d \rightarrow \bar{o} d \rightarrow \bar{o}$ seems to give a partial explanation of some adverbs of manner: e.g. mớlō $\rightarrow$ móddŏ, and hence perhaps some spoutces by analogy of Iambic words (cp. Instrumental, below).
$\mathrm{e}+$ ed might similarly $\rightarrow$ Greek $\eta \delta \rightarrow \eta \varsigma, \eta$ inder the same conditions: (cp. possibly $\dot{\epsilon} \xi \hat{\eta} \rho$ 'in order' and $\delta(\pi \lambda \hat{\eta})$. In Latin $\mathrm{e}+\mathrm{ell} \rightarrow \overline{\mathrm{e}} \mathrm{d} \rightarrow \overline{\mathrm{e}}$ seems to give a partial explanation of e.g. bénē $\rightarrow$ bénuě, and hence perhaps some spondees (e.g. àre $\rightarrow$ ârě) by analogy of Iambic words (cp. Instrumental, below).

I camot conceive how we can exclude these Alverbials (of mamer, cte.) from an at least partially Ablatival origin (with which cp. Sanskrit, and Latin ex aliquā parte, and Greek ék нє́pous tivos).
$o+d$ might $\rightarrow$ Greek of $\rightarrow o s, o$, similarly: might this possibly partly explain cimó(d?), ¿̃óó (1 ? ) etc., beside dative (?) itaí?

## Dutive:

I. E. $\bar{o} i, \bar{e}(i) ; S . \bar{a} y n, y \bar{a} i, y \bar{a} ; G . \omega$; L. $\bar{\sigma}, \bar{o} i$ :
S. āya : possibly a contamination of Dative o or $\mathrm{e}+\mathrm{ai} \rightarrow \mathrm{ai}$ and Instrumental a (for meaning v. the Cases, and the criticism of Monro (above), and Appendix II.).
S. yāi : possibly a contamination of the Dative of an 0 -stem (aii) and Dative of i-stem (ye): for possibilities of Heteroclisis cp. $\bar{a} u$ (given as Locative of an $i$-stem), perhaps really $\bar{a}$ (Instrumental of $\overline{\text { an}}$-stem or o-stem (?)) +u , or else the 'suffixless Locative' of an u-stem.
S. yà : possibly Instrumental of an i-stem, borrowing its $\bar{a}$ from vowel-stems: or, not impossibly, a contamination of Locative i, and Instrumental $\overline{\mathrm{c}}$ (of an o-stem).
G. $\omega$ : possibly $0+\mathrm{ai} \rightarrow \omega \iota \rightarrow \omega$.
L. öi: why öi ?-does any Inscription prove the vowel o here to be long? I think not.
L. $\bar{\sigma}:$ possibly $o+$ ai might $\rightarrow \overline{\mathrm{o}} \rightarrow \overline{\mathrm{i}}$ : it is not absolutely
impossible for it to be an Instrumental with Dative meanings, or even sometimes a Locative ( v . the next clause).

## Locative :

I. E. oi, ei ; S.e ; Gi. ol, $\epsilon$; L. $\bar{\imath}$ :

This seems natural ; the possibility of a new Locatival $\omega$ in Greek beside ou, so as to $=\bar{a}$, because e.g. the Locative Plural ous =aぃs, is suggested at the end of Appendix V. (A Latin Locative ò beside ì by a not dissimilar proportional analogy, is just conceivable.)

We might reasonably suggest that $\mu o \iota, \pi o \hat{\imath}$; oi (and Thessalian oo with some typical (enitival meanings), and Sanskrit me, and Latin -ī (e.g. dominī) might be Lucative forms extended over some meanings once more typically expressed by the Dative or Genitive (v. under Cases, and the criticism of Monro, and Appendix II.): for in Sanskrit we have Locative mayi often used with the meanings also expressed by the Genitival mama.

## Instrumental:

I.E. $\bar{o}, \bar{e}$, bhi, mi, ebli, emi ; S. $\bar{u}$, ena; G. $\pi \omega, \pi \eta, \phi \iota$; L. modo, are:
I.E. $\bar{o}, \bar{e} ;$ G. $\pi \omega, \pi \eta$; L. modo, irre: the Greek and Latin forms might possibly also come from Ablatives $\mathrm{o}+\mathrm{od} \rightarrow \overline{\mathrm{o} d} \rightarrow \overline{0}$, $\mathrm{e}+\mathrm{ed} \rightarrow \overline{\mathrm{e}} \mathrm{d} \rightarrow \overline{\mathrm{e}}$ as well as from Instrumentals $\mathrm{o}+\mathrm{o} \rightarrow \overline{\mathrm{o}}, \mathrm{e}+\mathrm{a}$ $\rightarrow \bar{e}:$. Ablative (above).
I.E. bhi ; G. $\phi \iota$ : this form is universally classed as Instrumental, whereas $-\theta \iota$ is classed as Locative ; I should class $\phi \iota$ as possibly an alternative Locative ending with e.g. $\iota$ and $\theta_{\iota}$ : the meaning presents no difficulty (v. Cases and the eriticism of Monro, and Allen and Greenough (above), and Appendix II.), and the use with some typical meanings of a Genitive (e.g. in Greek) finds more parallels with the Locative form (cp. Thessalian) than with the Instrumental. Latin (ti)bi looks like this bhi $\rightarrow$ bī by association with Locatives like domini and Datives like pedī: v. further under the Plural -bhi (below).

## Plurcl.

## Genitive:

I. E. $\bar{o} m, \bar{e} m$; S. $\overline{\text { c.m }}$, $\overline{\text { uñ }}$; G. $\omega \nu$; L. um (orum from the pronominal declension, with the long vowel partly from ārum by proportional analogy, and also possibly from $\overline{\mathrm{s}}$, aecusative plural, and from contamination of $o+s o m \rightarrow o r u m$ and $o+o m$ $\rightarrow \overline{0} \mathrm{~m}$ ): this termination was possibly of an adjectival nature originally, ep. Sanskrit asmākāain kuru sahāyām 'do us a favour,' where a possible origin is seen ; in the pronominal deelension is it possible that the s was the sign of the plural, and that $s+o m$ was like the Locative Plural s +i ?

## Locutive:

I.E. ois, su, si ; S. es.u ; G. oıs, o८ซ८ ; L. īs (?), ōs.
I. E. ois; G. oos; L. is: look like the simple Locative singular + the plural s, just as the Accusative looks like the Accusative singular + the plural s. Why hus the Table singled out this exceedingly natural form for a query? and why is there no query against ōs? There is one thing to note about Latin is, that it may possibly go back to eis as well as to ois (ср. оїкоь, оїкє七). If ois would not $\rightarrow$ Latin īs, but (?) $\rightarrow$ és, then perhaps the obvious analogy of the Lucative singular oi $\rightarrow \overline{1}$ might have helped to produce iss.
I.E. si ; G. ouv८: this Greek form looks like the Locative singular + Plural s + an additional Locative termination, perhaps transferred by analogy from the consonant declension, where possibly the Plurals was added to the stem, and then the Loeative , [e.g. $\pi o \delta-\sigma-\iota, \dot{\epsilon} \pi \epsilon \sigma-\sigma-\iota]$ : so that the Locative element may necur twice here [for the repetition of an element cp. $\dot{\epsilon} \pi \epsilon \sigma-\epsilon \sigma-\sigma \iota$ $\rightarrow \dot{\epsilon} \pi \dot{\epsilon} \epsilon \sigma \sigma \iota$, and Sanskrit esu from (?) ois-u and eis-u]. So that the $\sigma \iota$ might be Greek, and no more Indo-European than the aspirated perfect was.
I.E. su; S. eșu: this Sanskrit form looks like the Loeative singular + the Plural $s+$ the 11 which, added after a noun, gave a Locatival meaning in Vedic ; whether the Locative i was a deictic particle originally, and added after a stem with the same meaning which it had in Sanskrit, I do not attempt to
say: and it would also be hard to say whether i and u were connected with the i and ut the end of roú ouv and dadāu etc. Whether this $n$ occurs in $\mu \epsilon \tau a \xi v$ or whether we have here a simple u-stem withont case-ending, I do not attempt to say.
L. ōs; how can we put it as a Locative, without a large query? oi $+s$ might naturally $\rightarrow \bar{i} s$, and in the $\bar{a}$-declension anis might possibly $\rightarrow$ as (but this is extremely doubtful), and hence by proportional analogy, becanse e.g. Dative of a-stem $(\overline{\mathrm{a}})=$ Dative of o-stem ( $\overline{\mathrm{o}}$ ), the Locative Plural of the o-stem (īs) might possibly have been remorlelled to is in order to correspond to às the Locative Plural of the $\bar{a}$-stem(?). Then again, $\bar{o} s$ might possibly be $a+$ Instrmmental $a+$ Plural $s \rightarrow \bar{s} s$, or might arise by proportional analogies (v. end of Appendix V.) from the $\bar{a}$-stem ( $\bar{a}+$ Instrumental $a+$ Plural $s \rightarrow \bar{a} s$ ), or it might well be Dative, formerl by the Dative Singular in $\overline{0}$ and Plural s.

Lastly, one might reasonably add S . ebhis as a possible Locative phural, i.e. Locative ei or oi t the possible Locative ending bhi + Plural s. This seems in every way natural, if the Sanskrit $e$ here is really the Locative Singular ending: thus e (Locative Singular from oi, ei (?)) + bhi (Locative (?) ending) $+s$ (Plural ending) would correspond to e (Locative Singular $)+s$ (Plural ending) $+u$ (Locatival). Granted that e is Locative, then it seems natural that the termination (bhi) arded to e might be Locative also.

And so there may have been a variety in the formations of the Locative Plural, e.g. it might have been formed by stem + Locative $\mathrm{i}+$ Plural $s$, or stem $+\mathrm{i}+\mathrm{s}+\mathrm{i}$, or stem $+\mathrm{s}+\mathrm{i}$, etc. There can really be no certainty ahout what was IurloEmropean.

## Dative-Alutive:

I. E. obh om ; S. bhyas ; No Greel: or Latin:
S. bhyas may have been the bhi, the ending of (!) the Locative (cp. above) + os, es the sign of the Genitive: there is no difficulty about supposing a Lucative to extend, in the Phural, over some meaning of a Genitive, and the Locative and Cenitive over some meanings of a Dative and Ablative (v. under the M. T.

Cases and in Appendix II.), and also the Genitive to extend over the Ablative meanings here, as perhaps in the Singular: or else we may suppose that the a is the Instrumental ending and $s$ the Plural ending: we might then have an Instrumental ending added to the (?) Locative bhi which had extended over some Instrumental meanings (v. under the Cases and in Appendix II.).
G. and L.: it is quite possible that $0+$ ai or $\mathrm{e}+\mathrm{ai}$ (Dative Singular $)+$ Plural $s$, might $\rightarrow$ ōis or $\overline{\text { cis }} \rightarrow$ ois or eis $\rightarrow$ is, or else $\overline{\mathrm{o}}$ is or $\mathrm{e} \mathrm{i} s \rightarrow \overline{\mathrm{o}} \mathrm{s}$ or és, either phonetically, or on the analogy of the Dative Singular $\bar{O}(\mathrm{i})$ or $\overline{\mathrm{e}}(\mathrm{i})$ : thus the Creek forms might have been oıs ( $\epsilon \iota \varsigma, \omega \varsigma, \eta \varsigma)$, and the Latin forms īs, $\bar{s} s,(\overline{\mathrm{e}} \mathrm{s})$.

## Instrumental:


I. E. $\overline{\text { ois }}$; S. āis ; G. ous: why should we give to the Instrumental Plural a form which it does not possess in the Singular, and which exactly corresponds to the form which the Dative (and Locative) do possess in the Singular? If we do give it, we should set a very large query against it ; a Dative Singular $0+$ ai or $\mathrm{e}+\mathrm{ai}+$ Plural s as has just been shown, might possibly $\rightarrow$ ōis ēis $\rightarrow$ S. āis, G. o九s ( $\epsilon \iota \varsigma)$, L. is: for the possible Locative origin of all these forms by proportional analogy, cp . above under the Locative, and at the end of Appendix V.
I. E. oblŭ̄s ; G. $\left(\theta \in \dot{\sigma}^{-}\right) \phi \iota$ : this form may be possibly Loca-tive-bhi (+ Plural s in Sanskrit). Is the Sanskrit e from stem o or e + Locatival i ? Why not class Italian ōs here?

As to the Latin bus, which occurs in every declension except this, did it possibly arise from Locative bhi (cp. Celtic bis) or bh (without the Locative i) + os (Genitive and, (?) before dentals, Ablative) or else bh(i) + Ablative od + Plural s (I am very much in favour of this possibility)? or is the us not impossibly the Sanskrit " added, with Locatival meaning, to bh or bli, and having the Plural $s$ added to it? (Could $u \rightarrow$ dialectic o here on the analogy of the o of the Genitive Plural om? ? ${ }^{\text {a }}$

To sum up then, for the present:
If we classify by meanings, Appendix II. and the criticism of

[^15]Allen and Greenough and of Monro (above) and the Cases (in the Grammar) show that, as analogical extensions might potentially occur in almost any direction to an enormons extent, we are building our house (a very neat house, it may be, and a very pretty house) on quicksand: if we classify by forms, and attempt a really conscientious treatment, which makes allowance for a certain amount of original uniformity of formation, for phonetic possibilities, for (especially proportional) analogies, for contaminations etc. we may perhaps arrive at the conclusion that, as far as this Table goes, at least in these plural cases, Brugmann has possibly put his one query, and most of his brackets, and many of his formations, in the wrong places, and besides this has left out a great many exceedingly obvious possibilities.

The other stems can now be treated more briefly:

## $\overline{\mathrm{a}}$-stems:

Genitive:
I.E. $\bar{\pi} s$; S. $\overline{\text { II }} s$; G. $\bar{\iota} s$, ov; L. $\bar{c} s, \bar{\pi} \bar{\imath}$, ue:
I.E. ās; G. às; L. às seem natural, coming from $\bar{a}+e s$ or $\overline{\mathrm{a}}+\mathrm{s}$.
S. āyās may possibly be a contamination of stem $\bar{i}+$ Dative ai or Locative $i$ and of Genitive ās, $\rightarrow$ àyās (for the meanings v. Appendix II and the Cases): or cp. under the ostems (Jative S. āyāi), for y being possibly a kind of buffer to keep the stem and termination from contracting, so that the Genitive Singular and Nominative and Accusative Plural should not have the same form : or for y coming, possibly, from the i-declension: for the possibility of the converse ep. avè which has come to be regarded by Sanskrit Grammarians as Locative of an i-stem, but which, among other things, may possibly he Instrumental ( $\bar{a}+a$ ) or 'suffixless Locative' (?) of an $\bar{a}$-stem.
G. ou seems to be transferred from the o-declension, perhaps partly becanse ou was felt to be a more 'masculine' ending than $\bar{e} s$.
L. $\bar{a} \bar{i}$, ae: here we have a problem-to realise this is half the battle-and it will be best to consider it under the Locative and Dative: nothing positively demands that we should set down a form as a Genitive simply becanse its present meanings
seem partly genitival: many Sanskrit Locative (and Dative) forms, which have meanings which seem partly genitival, we should not dream of calling Genitives simply for that reason.

## Ablative:

$$
\text { I. E. } \bar{\epsilon} s ; S . \bar{\pi} y \bar{\mu} s ; G . \bar{a} \varsigma, o v ; L . \bar{a}(d):
$$

I. E. às; G. $\bar{a} s$ : on the question as to whether we are to state dogmatically that originally a Genitive and Ablative had the same form in every declension but one, $v$. the last page of this Appendix: to our ideas the from-notion must have quite early required an expression separate from the vague quasiarljectival notion, though the latter is shown to often extend over, and to come to clearly express certain from-notions, in course of time ( v . Appendix II. etc.) : what objection can there be to suggesting that possibly the Ablative had a uniformity of formation, and generally ended in -od, -ed, -d (apart from dhe(n) etc.) even if the Genitive form did ultimately sometimes extend over some Ablatival uses, so that certain Ablative forms were no longer necessary, and so dropped out?

In Greek $\bar{a} d$ might $\rightarrow \bar{a} \varsigma$ before dentals, etc., $\bar{a}$ otherwise : $\bar{c}$. (oü $\tau \omega \varsigma, o u ̋ \tau \omega$ ) and the same will apply to Latin (às) $\bar{a}$, even if às does not survive.
G. ov: the same explanation may hold good as for the Ablative ov of the 0 -stems.
S. ayās: the same will hold good for this às for the Ablative $\bar{a} s$ (above), and cp. the āyas of the Genitive of these $\overline{\mathrm{a}}$-stems (above). In Sanskrit it seems as if ail did not $\rightarrow$ as.

## Dative :

I.E. $\bar{a} i$; S. $\bar{a} y \bar{c} i ; G . \bar{a} ; L . \bar{a}, a e:$
I.E. $\bar{a} i ;$ G. $\bar{a} ;$ L. $\bar{x}$, ae: it is possible that the stem $\bar{a}+$ the Datival ai might $\rightarrow$ Greek $\bar{u} \iota \rightarrow \bar{a}$, and Latin $\bar{a} i \rightarrow \bar{a}($ cp. Latin Dative o $+\mathrm{ai} \rightarrow \overline{\mathrm{o}} \mathrm{i}_{\mathrm{o}}^{\mathrm{o}}$ e.g. domin̄̄ (?)): Latin $\bar{a}$ may be also or only Instrmental $\bar{a}+a \rightarrow \bar{a}$, and for Ablative $\bar{a}$ from $\bar{i}+(e) d$ v. above. But what did happen in Latin? Did a $+a i \rightarrow \bar{a}+\bar{i}$ (natinraī), or was the form in $\bar{i} \bar{i}$ due to the arddition of Locative i from the o- or i-stems, or Dative i from the $i$ - or consonant-stems, to the stem $\overline{\mathrm{a}}$, or to the Dative (and

Locative) āi? Again was aī preserved as an archaism, whereas phonetically it, or the Dative $\bar{a}+$ ai, would have become $\bar{a}$ or ae, or are both $\bar{a}$ and ae Locative forms extended over the meanings of the Dative, ete. etc.? or, lastly, did the stem $\bar{a}+$ Locative i or Dative ai $\rightarrow \bar{a}$, and was this form used mainly at the end of lines and in positions where the metre allowed either a long or a short vowel? in this case the firal i would have been short originally, and perhaps it often is short still, even if e.g. the analogy of the Locative $\overline{1}$ of i - and o - stems and the Dative $\overline{1}$ of consonant and $\mathrm{i}-$ stems, has been at work.
S. ayāi : is this a Locative and Dative āi + the addition of an extrat Datival suffix ai, perhaps partly from the $o+$ ai or $\mathrm{e}+\mathrm{ai}$ of the o-declension? (cp. for the possible repetition of the element, i" $\pi \pi o \iota \sigma \iota$ ), or was the y put as a buffer to join ai (Dative partly on the analogy of the o-ductension (?)) to the stem $\bar{a}$, or is this form a contamination of stem $\bar{a}+$ Datival ai $\rightarrow \bar{a} i$, and of iāi (dative of io or $\mathrm{i} \overline{\mathrm{a}}$ stem or Loeative of $\mathrm{i} \overline{\mathrm{a}}$ stem), or of iai ( Dative of i -stem, or Locative of io-stem) ?

The whole question is a maze, and it is folly to be dogmatic or neat, and almost impossible to be clear.

## Locative:


I. E. āi; G. $\bar{a}$ : this seems natural. For $\eta \phi \iota v$. below.
G. $\Theta \eta \beta a \iota \gamma \in \nu \eta$; ; L. ae: what is the ( $\Theta \eta \beta)$ aı- here? is it Dative Singular (with Locative meaning), corresponding to Dative $\chi a \mu a i$ ? (v. Principle V. B. 3 for the meaning :), or is it Locative by proportional analogies the converse of those suggested at the end of Appendix V.: c.g. Dative $\bar{a}=$ Dative $\omega$ etc. hence a new Locative al, beside $\bar{a}$, was formed on the model of (oiк) ou, (oiк) $\ell$, just like a new Locative (oiк) , beside the old (oiк) ou, being remodelled on ( $\chi \omega \rho) \bar{i}$, Locative (N.B. perhaps $\bar{a}+$ Lucative $\mathrm{i} \rightarrow$ a before worls beginning with consonants, and the analogy of the Plural ats might have been at work). Or was $(-$ nßur- regarded as the Plural-stem? ae may possibly be the Phonetic resultant of $\bar{a}+$ Lecative $i$ : we have not enough data for dogmatisms even here: e.g. possibly before words begiming with vowel $\bar{a} i \rightarrow \bar{a}\left(\right.$ cp. $^{\prime}$ (!) anaio $\rightarrow$ anăи $\rightarrow$ amo) while before
some consonants, $\bar{a} i \rightarrow$ ae ; or was ae (Locative) a new formation beside the old $\bar{a}$ (Locative), on the analogy of oi, ci of the ostems, because e.g. ais (Locative plural) possibly corresponded at that time to ois, cis (Locative plural)?
S. àyan: is this a contamination of Dative $\bar{a}+$ ai and Locative $\bar{a}+i$ both $\rightarrow \bar{a} i$, and of the Accusative $\bar{a}+m$ ? or was $\bar{a} m$ (stem $\bar{a}+$ Accusative m) added to the $\bar{a}$ of the stem with $y$ as a buffer between ? or did the $y$ arise from contamination with i , io, or ia stems ( (I. v.) or was it possibly adjectival in origin (cp. asmākānı) ?

## Instromental:

I.E. IT ; S. $\overline{\bar{c}}$; G. $\bar{a}, \eta \phi \iota:$
I. E. $\bar{a} ; \mathrm{S} . \bar{a} ; \mathrm{G} . \bar{a}$ scems natural, arising from $\bar{a}+\mathrm{a} . \mathrm{G}$. $\eta \phi \iota$ looks like an extra termination - $\phi \iota$ (Locative?) added to an Instrumental case-form, or possibly to the pure stem.

Why not put Latin $\bar{a}$ as possibly Instrumental, from $\bar{a}+$ $\mathrm{a} \rightarrow \overline{\mathrm{a}}$ ? Could Locative $\overline{\mathrm{a}} \mathrm{i} \rightarrow \overline{\mathrm{a}}$ before vowels ?

## Pleral:

## Genitive:

I.E.? ? S. cimum; G. ā $\omega \nu$, $\hat{\nu}$; L. īrum: these seem natural, especiafly if we suppose them to be possibly aljectival in origin : the Greek $\bar{a} \omega \nu$ would perhaps be stem $\bar{a}+\omega \nu$ from the o-stems (q. v.).

## Locative:


I.E. às; L. às: possibly Locative $\bar{a}+\mathrm{i}+\mathrm{s}$ or Dative $\overline{\mathrm{a}}+\mathrm{ai}$ +s might $\rightarrow \overline{\mathrm{a}} \mathrm{s}$ ( cp . stem $0+$ Dative ai $\rightarrow \overline{\mathrm{o} i} \rightarrow \overline{\mathrm{a}}$ ), but it is far from certain, notally in Sanskrit: possibly we have here a pure stem + plural s (for pure stems with Locative meaning cp. Sanskrit vyóman 'in the sky,' and $\delta \dot{\prime} \mu \epsilon \nu$ ), or possibly only or also $\bar{a}+$ Instrumental $a+$ Plural $s \rightarrow \bar{a} s$ or Ablative àds $\rightarrow \overline{\mathrm{a}} s$.

However, possibly $\bar{a}+i+s$ might have become ais $\rightarrow \bar{i} s$, either phonetically (always, or before words beginning with certain letter.s), or on the analogy of is the (?) Dative and Locative Plural of the o-stems (v. above): for e.g. dulcibus
feminine $=$ dulcibus masculine - hence a new feminine is of the $\bar{a}$-stems beside the masculine is.
I.E. āsu; S. āsu might admit of the same explanation: the ${ }^{1}$ might have been the $u$ added to give a Locative meaning (cp. Vedic Sanskrit).
I. E. āsi ; G. $\bar{a} \sigma \iota$ admit of the same explanation, except that i was perhaps the Locative case-ending.
G. aıs, $a_{\iota} \sigma_{\imath}$ : the Locative Singular āi, and possibly the Dative also, + Plural s ( + Lucative i) might $\rightarrow a \iota \sigma(\iota)$, corresponding to oı $\sigma(\imath)$ : for āis $\rightarrow$ ais cp. Z $\eta$ ús $\rightarrow$ Zeús.

For the possibility of the bhy of Sanskrit abbyas, and the b of ābus, being partially Locative, v . under the o-stems.

## Dutive-Ablutive:

I. E. ciblı-, um- ; S. abluyas; L. ithus:
S. āblyas: here $\bar{a}$ may possibly be the stem $\overline{\mathrm{a}}$, or stem + Instrmmental $a \rightarrow \bar{a},+$ bhi the Locative (?) ending, and as might conceivably be either the Cienitive (extended over some Ablatival meanings) or the Instrumental a the plurals.
L. $\bar{a} b u s: ~ p o s s i b l y ~ t h e ~ s t e m ~ \bar{a}$, or the stem + Instrumental a $\rightarrow \bar{a},+$ bus, for possible Ablatival origins of which v. under the o-stems. Why could not stem $\bar{a}+$ Dative ai + Plural spossibly $\rightarrow$ ais $\rightarrow$ ais $\rightarrow$ is, either phonetically, or by an analogy such as that described under the Locative just above: i.e. if is (feminine Dative) was formed from is (masculine Dative) because e.g. dulcibus $($ feminine $)=$ dulcibus $($ masenline $)$ ?

Instrumentul:

I. E. ābhy̆̃s; S. ābhis may possibly be stem à (on stem a + Instrmmental $a \rightarrow \bar{a}$ ) + Locative (?) bhi + Plural s.
G. ass; L. is: cp. mader o-stems: why should one give to the Instromental if form apparently inconsistent with its other forms, and possibly identical with a regular Locative form? The meaning can be no safe guide (v. Appendix II., and the Cases, and the criticism of Monro and of Allen and (Areemough, above), and it is hard to see what gromuls we have for a dogmatic classification apart from meaning and form. For (fili)abus v. o-stems.

The same general criticism will apply here as under the 0 － stems：it is possible that most of these plural forms and most of the brackets and queries are in the wrong places．

## i－stems：

## Genitive：

I．E．ois，eis，ies，ios；S．es，yut ；G．єos，є由s，クos，っos；L．ìs：
All these forms seem possible，the strong form appearing beside the weak form：Latin is would be from strong ei，or oi，+ es $(\rightarrow$ is $)$ ，or $s$ ，or from weak $i+$ es（ $\rightarrow$ is $)$ ：is the is which we du find often used from weak $i+s$ ， ，is this short vowel from the consonant－declension by proportional amalogies etc．（e．g． turribus $=$ pluribus hence turřs－beside turnis－＝pluriss）？

## Ablative：

Same as genitive，except Latin $\bar{i}(d)$ ：on the possibility of these same original forms with $d$ ，not $s$ ，$v$ ．quite at the end of this Appendix，and also cp．Ablative singular of $o$－and $\bar{a}$－stems and the footnote on p．xvi．Is id on Inscriptions id，not idl （from ěd）？

## Dative：

I．E．eiui，iui，̄（？）；S．aye，ye， $\bar{\imath}$ ；G．ßরíā̀；L．turrī：
S．aye，ye scem natural；aye may possibly go back to the strong form ei + ai or oi + ai，and ye to the weak form $i+a i$ ．
$\mathrm{S} . \overline{1} ; \mathrm{G} . \bar{\imath} ; \mathrm{L} . \mathrm{i}$ ：if we give the Dative an original form ai， then Sanskrit and Greek ì seem absolutely umatural：where else have we the slightest evidence for $\mathrm{i}+\mathrm{ai} \rightarrow$ Sanskrit and Greek $\bar{i}$（though there may have been some influence at work which we cannot now realize）？Latin ì might possibly go back to Stem i＋Dative ai $[\rightarrow i]$ ，or it may be a Dative formed，by proportional analogies，from the consonant declension：e．g． turribus＝pluribus etc．，hence turrī，a new form on the model of plurai $\rightarrow$ plurī，beside turriai $\rightarrow$ ？（similarly cp．ove beside ovi on the model of plure；）or again turri may be only or also Stem $\mathrm{i}+$ Locative $\mathrm{i} \rightarrow \overline{\mathrm{i}}$ ．Looking at the meanings of the Sans－ krit Dative and Locative，and the Cases，and the criticism of Momro（above），and at the（possibly）Locative alteri etc．used
with some typical meanings of a Dative, can we not here suggest, as almost probable, a Locative form, Stem $\mathrm{i}+$ Locative $\mathrm{i} \rightarrow \mathrm{i}$, both in Greek and Sanskrit, with some typically Datival meanings? Personally, I see no probable objection to IndoEuropean $\mathrm{i}+\mathrm{i} \rightarrow \overline{\mathrm{i}}$, at any rate before words beginning with certain letters, whereas I do see possible objections to IndoEuropean itai $\rightarrow \overline{1}$ in Sanskrit and Greek. For $\eta \ddot{i}, \eta$ cp. below.

Of course, if it be thonght that it is (in any sense of the words) 'Comparative Philology' to start with the (supposed) present Datival meanings of the form $\bar{i}$, and then to postulate the form i as an Indo-European Dative form (with a query, which, for some reason or for no reason, is not put against the Sanskrit and Greek forms), then my objections fall to the ground. Personally I fail to see how Brugmann's Table can have been the result of any other method. I uuly submit, 'Is it the right method?'

## Locative:

 $\bar{\iota}(?):$
I. E. cii ; S. ayi ; G. $\epsilon \iota$; L. ī seem natural, if we suppose Stem ei + Locative i $\rightarrow$ eii $\rightarrow$ ei (intervocalic i disappearing) $\rightarrow$ Greek $\epsilon \iota$ Latin $\overline{1}:$ in Greek it is not impossible that bcfore a word beginning e.g. with s , a Dative, ei or $\mathrm{e} \mathrm{i}+\mathrm{ai} \rightarrow$ ëai $\rightarrow \eta$, might $\rightarrow \epsilon \iota$ (cp. Zqus $\rightarrow$ Zeús). In Latin, Stem i + Locative i $\rightarrow$ i seems natural,
I. E. $\ddot{e l}$; G. $\eta l, \eta$ : how were these formed? Were they from stem ēi + Loc. $\mathrm{i} \rightarrow$ ēii $\rightarrow$ ēi, when intervocalic i disappears $\rightarrow$ Greek $\eta \iota \rightarrow \eta$ ? but $\eta \iota$ can also go back possibly to Dative stem ēi + Dative ai $\rightarrow \eta \iota a \iota \rightarrow \eta a \iota \rightarrow \eta \iota \rightarrow \eta . \quad$ Or can it be that the Greek $\eta \ddot{i}, \eta$ is partly tue to Heteroelisis with the $\bar{i}$-stems? i.e. that it is stem $\bar{a}+$ Locative $i$ or Dative ai (for the possibility of the couverse Heteroclisis v. the $\bar{a}$-stems)?
I. E. é ; S. $\overline{\mathrm{a}}$, $\overline{\text { an }}$ : how can these belong to i-stems? i.e. is it certain that the i could disappear thus, except perhaps before words beginning with a vowel, where i may possibly have been treated like i between vowels? evidently Indo-European ē is assumed to explain Sanskrit, where possibly a simple $\bar{a}$-stem [used
with Locative meaning] or Stem à or o + Instrumental a, or this $\bar{a}+$ Locatival u, survives by Heteroclisis: for the converse cp. possibly sakhyáa given by Brugmann's Table as Dative of an $o$-stem without a query. For another explanation of an as due to Heteroclisis with a u-stem, or as transferred from the udeclension v . Lucative of u -stems (below).
L. e: possibly from consonant-stems by proportional analogy, e.g. turribus $=$ phuribus, hence turre on the model of phuri $\rightarrow$ plure : for other possible explanations of this e of consonantstems $v$. Locative of $n$-stems (below).
L. ì: this seems to come very simply from Stem i + Locative i, and possibly we may here class Greek $\bar{\imath}$ (e.g. $\beta \dot{a} \sigma i \bar{\imath})$ and Sanskrit $\bar{i}$, whether it has some of the present meanings of a typical Dative or of a typical Instrumental. The Latin form i may possibly be also Instrumental ( $\mathrm{i}+\mathrm{e} \rightarrow \overline{\mathrm{l}}$ ) or Dative, or Ablative, or sometimes one form sometimes another etc.

## Instrumental:


I. E. ī ; S. ì ; Ionic $\bar{i}$ : why should we give to the Instrumental a form which it need not have elsewhere, and which the Locative has elsewhere? evidently the meanings are the starting-point, and they are 'guides which are no guides' (v. muder Cases, and Appendix II., and the criticism of Monro and Allen and Greenough, above). Granting that the Instrumental ended in $\overline{\mathrm{a}}$, then could Sanskrit $\mathrm{i}+\mathrm{a}$ or Greek $\mathrm{i}+\mathrm{a} \rightarrow \overline{1}$ (except by such analogies as that of the $\overline{\mathrm{a}}$-stems, where $\overline{\mathrm{a}}+\mathrm{a} \rightarrow \overline{\mathrm{a}})$ ? On the other hand Stem $i+$ Locative $i$ would naturally $\rightarrow i$ in Sanskrit and Greek.
L. $\bar{i}, q^{1 u}: \bar{i}$ imight arise from $i+i$, or from Dative $i+a i \rightarrow i$ $+\bar{i} \rightarrow \bar{i}$, or also or only Instrumental $i+a \rightarrow i+c \rightarrow \bar{i}$, or from Ablative $\mathrm{i}+\mathrm{ed} \rightarrow \mathrm{id}$. quil may go back to one or more of the following (apart from its possible origin through contaninations of almost any two or more of the following), if we consider how much the stems qui- and quo-interchange in Latin: e.g.

1. quo or que + Locátive $\mathrm{i} \rightarrow \mathrm{qu}^{\bar{i}}$
quo + Ablative $\mathrm{ed} \rightarrow$ quo $+\mathrm{id}(?) \rightarrow$ quīd $\rightarrow$ quī quo + Instrumental $\mathrm{a} \rightarrow$ quo $+\mathrm{e}(?) \rightarrow(?)$ quī.
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2. qui + Locative \(\mathrm{i} \rightarrow q u i \bar{i}\)
    + Ablative \(\mathrm{ed} \rightarrow\) quid \(\rightarrow\) quī
    + Instrumental \(a \rightarrow\) quie \(\rightarrow\) quī.
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That which enables one to put down qui to any single form with certainty is still a secret undivulged.
L.e: from the e of consonant-stems this might be extended to the i -stems by proportional analogy: e.g. pluribus = turribus, hence ture (?) on the model of plure: for the $e, v$. under the Locative of 1 -stems (below).
S. yā: $\bar{a}$ is perhaps transferred from the $o$ - and $\bar{a}$-stems, with which perhaps the i-stems occasionally 'contaminated': the tendency might have been to make all Instrumentals, of whatever declension end in $\bar{\pi}$. It must be remembered that 'uniformity' in declensions of nouns worked on at least two principles:
(a) making the stem uniform: e.g. making the stem of one noun the same throughout, as far as possible;
(b) making casc-endings uniform: e.g. making all Instrumentals in Sanskrit end in $\bar{a}$ instead of having some in $\bar{a}$ some in a.

## Plural:

Genitive:
I.E. iōm; S. ìnum, ìm; G. ı $\omega v, \epsilon \omega \nu$; L. ium, ım: these forms seem natural (cp. the o- and $\bar{a}$-stems, above): the long vowel of Sunskrit might come from the $o$ - and a-stems (q. v.). G. $\epsilon \omega \nu$ might arise from $\epsilon \iota \omega \nu$ (strong stem), $\iota \omega \nu$ showing the weak stem: L. ium might possibly arise from ciōm (?) (with ōm as the analogy of the o-declension), or ciom, $\rightarrow$ iom (possibly just as dếneuō $\rightarrow$ dēnū̄), or from iōn or iom $\rightarrow$ ium; the Latin um might arise by proportional analogy, e.g. turribus = ducibus, hence a new form (?) turrum beside dacum. For the converse analogy, i.e. possibly the analogy of the Genitive plural inHuencing the Locative plural, ep. Greek e $\sigma \iota$ below.

## Locative :

I. E. is, isu, isi ; S' isul ; G. $\iota \sigma \iota, \epsilon \sigma \iota$; these seem natural, if formed from Stem $i+$ Plural s (+ Locative $i$, or Locatival u).
G. $\epsilon \sigma \iota$ seems evidently to borrow its $\epsilon$ from the Genitive $\epsilon \iota \omega \nu$, $\rightarrow \epsilon \omega \nu$ etc. (cp. the $\epsilon$ of $\phi \rho \epsilon \sigma i$ partly due to the analogy of $\phi \rho \in ́ v \epsilon \varsigma)$.

For the possibility of Sanskrit iblyas, ibhis, and Latin ibus being, at any rate partially, Locatival in form, v . under the oand $\overline{\mathrm{a}}$-stems (above).

## Dative-Ablutive :

I.E. ibh-, im-; S. iblyas ; L. ibus: v. under o- and à-stems (above) for some possible explanations of these forms as Ablatives ete.

## Instrumental:

I. E. iblū̆(s), mǔs; S. iblıis: possibly Locative blii + Plural s. For -bus v. the o-stems.

## u-stems :

## Genitive:

I. E. ous, eus, ues, uos; S. $\overline{\text { ons , vus, muts ; G. єos, } \epsilon \omega \varsigma, ~ v o \varsigma ; ~ L . ~}$ $\bar{u} s, \bar{\imath}$, nos, lis:
I. E. ous, cus, hes, nos; S. ōs, vas, uvas; G. qos, vos; L. uos, uis seem natural, if we suppose the stem-vatiation (eu, ou, u) and the termination-variation (es, os, s), either original or produced by the levelling process: e.g. strong ell +s , and ou +s , and weak $\mathrm{u}+\mathrm{os}$ or es. S. os could go back, possibly, to eu +s , or to $0 \mathrm{u}+\mathrm{s}$, and vas to $\mathrm{u}+$ es or $\mathrm{u}+\mathrm{os}$, and possibly the double $u$ of uvas was like the (apparently) double i of Locative iyi of i stems: (it is not impossible that the difference between $u$ and uv originated in disyllabic and monosyllabic words, under such influences as the preceding letter being a consonant etc.).
G. $\epsilon$ os might go back to enos, and $\epsilon \omega \varsigma$ might arise, by 'metathesis of 'quantity,' from èu + os (e.g. $\beta a \sigma \iota \lambda \eta$ Fos $\rightarrow \beta a \sigma \iota-$ $\lambda \epsilon \omega \varsigma$ ) and the analogy of $\bar{e} i+$ os (cp. above under the $i$-stems).
L. nos could possibly go back to stem ou or eu or $\mathrm{u}+\mathrm{os} \rightarrow \mathrm{u}$ + os $($ cp. dēneuō $\rightarrow$ dēnouō $\rightarrow$ dēnuō $) \rightarrow \mathrm{u}+$ us $(\rightarrow$ ùs? ): or was is formed by proportional analugy: e.g. (?) Ablative manū(d) $=$ faniliā $(\mathrm{d})$, and Accusative plural $\mathrm{mm}+\mathrm{s} \rightarrow \mathrm{uns} \rightarrow \overline{\mathrm{s}}=\overline{\mathrm{a}} \mathrm{ms}$ $\rightarrow$ ans $\rightarrow$ às-hence a new genitive us (beside the possibly regnlar formation uos) on the model of familias etc.
L. uis: was it from $u+e s \rightarrow u+i s$, or did the is come from the analogy of the consonant-declension?
L. ì seems to have no place in this declension, for it seems to be e.g. the Locative of an o-stem (o or $\mathrm{e}+$ Locative $\mathrm{i} \rightarrow \mathrm{i}$ ) or Instrumental or Locative of an i -stem $(\mathrm{i}+\mathrm{i} \rightarrow \overline{\mathrm{i}}, \mathrm{i}+\mathrm{a} \rightarrow \mathrm{ie} \rightarrow \mathrm{i})$ : for the parallel forms of $o$ - and $u$-stems cp . dommī (Dative of u-stem) beside domō (Dative of o-stem): out of two or more stems one would naturally predominate eventually, but another might leave one or two traces (cp. Plantus e.g. for verbs in -ěe beside those in ēre: is it possible that the of monnī was partly due to Heteroclisis with an u-stem ?).

Ablative-Same as Genitive, ercept Latin $\overline{\prime \prime}(d)$ : for the possibility of original Ablatives in ed, orl, $d, v$, the note at the end of this Appendix, and v. also under the o-stems (above).

## Dative:

I. E. euai, uai; S. ave, ve; L. ut: these forms seem natural; Sanskrit ave may possibly go back to euai and ouai with the strong stem; whereas nai $\rightarrow$ ve wonkl have the weak stem. L. $n \bar{i}$ might possibly go back to the strong eu or ou $+\mathrm{ai} \rightarrow$ uai $\rightarrow$ nī, or to the weak $u+a i \rightarrow n \overline{1}:$ it is not altogether impossible that the $\bar{i}$ here might have been only or also like the $\bar{i}$ of naturaī, i.e. possibly from stem $11+$ Locative $\bar{i}$ (from o-stems, or from i-stems) or Dative i (of i-stems, or consonant-stems).

As to Greek, is it not possible that Greek $\epsilon v+a \iota$, before worls begimming with e.g. s, might $\rightarrow \epsilon$ vaı $\rightarrow \epsilon a \iota \rightarrow \eta_{l}(\rightarrow \epsilon \iota$ before words beginning with letters like s)?

## Locative:


I. E. ēn, S. āu might possibly have been stem without casesuffix (cp. vyóman 'in the sky'), but need we assume these forms as necessarily Indo-Enropean? can we not possibly have here a case of Heteroclisis? e.g. here a form may have come to be regarded as Locative of u-stems (cp. above on Locative of i stems), which was really $\bar{a}-$-stem (either pure, with a Locative meaning, or + Instrmmental a) or o-stem + Instrmmental a, with the Locatival 11 appended, as in the phral.
G. $\eta \mathrm{F}$ (? ?) might possibly be pure stem + Locative i. L. $\overline{\mathrm{n}}$ might possibly go back to ēn or en or ôu or ou (stem without case-ending, perhaps), or even to the weak stem $u+$ Locative $\mathrm{i} \rightarrow \mathrm{ue} \rightarrow \overline{\mathrm{u}}$ either phonetically ${ }^{1}$, or else by proportional analogy from other stems: e.g. possibly with i-stems Accusative Plural $\mathrm{im}+\mathrm{s} \rightarrow \mathrm{ins} \rightarrow \mathrm{i} \mathrm{s}=\mathrm{nm}+\mathrm{s} \rightarrow \mathrm{uns} \rightarrow \mathrm{n} \mathrm{s}$, hence, beside $\overline{1}$ of the i-stems, a Locative $\bar{i}$ of the u-stems was formed; or again e.g. Accusative Singular $u+m=$ Accusative Singular $i+m$ of $i$ -stems-hence beside Locative $\bar{i}+\mathrm{i} \rightarrow \overline{1}$ a new Locative $\overline{1}$ was possible, etc.
I. E. eui; S. avi; E. $\epsilon i$, , $\epsilon$ : S. avi might go back possibly to eni and oui; G. $\epsilon i, \epsilon \iota$ to eni.

## Instrumental:

$$
\text { I. E. } \bar{u} ; S . v \bar{u}, u n \bar{u} ; L . \bar{u}:
$$

S. và seems to be formed by the weak stem + Instrumental à, apparently borrowed from the o-declension ( $0+\mathrm{a} \rightarrow \overline{\mathrm{a}}$ ) or from the $\bar{a}$-declension $(\bar{a}+\bar{a} \rightarrow \bar{a})$.
I. E. $\bar{n}$; L. $\overline{\bar{n}}$. It seems to be assumed that $\overline{\mathrm{n}}$ is certainly Instrumental in Latin (whereas it may be only Locative, or only or also Ablative, and not Instrumental at all, for all we know), and this seems to necessitate the assumption of IndoEuropean ī, a formation apparently unlike other Instrumentals, i.e. not ending in a: of comse an analogical formation is possible, e.g. Accusative Plural $u m+s \rightarrow u n s \rightarrow \overline{\mathrm{n}} \mathrm{s}=\overline{\mathrm{a} m}+\mathrm{s} \rightarrow$ ans $\rightarrow \overline{\mathrm{a}} s$, hence an Instrumental mani formed on the model of $\bar{a}+a \rightarrow \bar{a}$; but this is very far from certain, and requires a large query. Could not Latin $\bar{n}$ (in so far as it is Instrumental) have been produced, possibly, by stem $u+$ Instrumental $a \rightarrow$ na $\rightarrow$ ve $\rightarrow \overline{\mathrm{n}}$, either phonetically (cp. dictı + esom $\rightarrow$ dictitrm $^{1}(?)$ ), or by proportional analogy, e.g. from the i-stems: possibly Stem $\mathrm{i}+$ Instrumental $\mathrm{a} \rightarrow \mathrm{ia} \rightarrow \mathrm{ie} \rightarrow \overline{\mathrm{i}}$, hence an Instrumental $\overline{\mathrm{n}}$,

[^16]because e.g. Nominative manus = turris, and Accusative Plural $\mathrm{ums} \rightarrow \mathrm{uns} \rightarrow \overline{\mathrm{u} s}=\mathrm{ims} \rightarrow \mathrm{ins} \rightarrow \overline{\mathrm{i}}$.

## Plural:

Genitice:
I. E. uйm; S. $\bar{u} n \overline{1} m, \bar{c} m$; G. $\epsilon \omega \nu$; L. uum: these seem natıral: the long vowel before $m$ may possibly have come from the $o$-stems, i.e. stem o + Genitive om $\rightarrow \bar{o} \mathrm{~m}$, and also from (?) the $\overline{\mathrm{a}}$-stems, $\overline{\mathrm{a}}+\mathrm{om} \rightarrow \overline{\mathrm{o}} \mathrm{m}$ (?) (but Doric $\bar{a} \nu$ ). Thus we may perhaps give this Genitive Plural a possible uniform ending -om (like the Instrmental singular ${ }_{\text {an }}$ ), and suppose that when om oceurs e.g. in consonant-, or i -, or u-stems, it is possibly transferred from the o- and $\overline{\mathrm{a}}$-stems, so as to make all Genitive Plurals alike (like the Sanskrit Instrumental Singular à in these stems, perhaps transferred from the $\bar{a}$ - and 0 -stems, i.e., $\bar{a}+a \rightarrow \bar{a}$, and $0+a \rightarrow \bar{a})$.

As to Sanskrit ium is it due to proportional aualogy with e.g. $\overline{\mathrm{a}}-\mathrm{and} \mathrm{o}$ - stems ?

It is not impossible that the nncontracted num in Latin (which should perhaps be spelt uom) differs from the Genitive Singular nos $\rightarrow$ ins (?) in having the long rowel, $n+\bar{m}$ (from the o- and $\bar{a}$-stems), which would perhaps prevent the contraction; i.e., at the time when the Genitive Singular nos $\rightarrow$ uns (?) $\rightarrow$ ins, the Genitive Plural nōm had not yet become nom, and so occurred under a different phonetic condition and did not contract to um. However, we find mamm (from man + om? on an Inscription.

## Locative:

I.E. us, usu, usi; S. ussu; G. єб九, єvб九: these would be like other Locative Plurals, perhaps Stem $11+$ Plural s (+ Locative i, or + Locatival 11).
G. $\varepsilon$ evo may possibly have been Stem en + Plural s + Locative $\mathrm{i}: \operatorname{Stem} u+\mathrm{s}+\mathrm{i}$ would $\rightarrow v \sigma \iota$, naturally. What is $-\epsilon \sigma \iota$ ? Is it a new formation on the model of e.g. the Genitive enom $\rightarrow \epsilon \omega \nu$, hence $\epsilon \sigma \iota$ produced by association of $\epsilon v \sigma \iota, v \sigma \iota$ with $\epsilon \omega \nu$ and Locative Singular $\epsilon i$ ? ер. $\phi \rho \epsilon \sigma i$ beside Pindarie $\phi \rho a \sigma i$ (from

nation of $\operatorname{sem} \rightarrow \dot{\varepsilon} \mu$ and of $\operatorname{sṃ} \rightarrow \dot{a}+$ kụtom, and $\kappa \epsilon$ by contamination of $\kappa \epsilon \mu \rightarrow \kappa \epsilon \nu$ and $\kappa!̣ \rightarrow \kappa а$.

In the Latin forms ubns ibus, $u$ and $i$ are perhaps modes of representing unaccented 11 , a sound somewhere between u and i (cp. $\bar{e}$ and $\overline{1}$ in Inscriptions representing ei, a sound somewhere between $\bar{e}$ and $\bar{i}$ ). The -bus may possibly contain a Locative element bhi (but ep. under the o-stems).

## Dative-Allative:

I. E. ubl-, um- ; S. ubliyes; L. ubus, ibus: for some possible explanations of these forms as Ablatives ete. v. under the o-stems.

## Instrumental:

I.E. ubȟ̌(s), umǔs; N'. ublis: ep. under the o-stems, for bhi being possibly Loeative as much as dhi (Greek $-\theta_{1}$ ), and not Instrumental and v. id. for -bus.
n-stems: (takeu as types of consonant stems). Genitive:
I. E. es, os; S. as; G. os; L. is: of the two terminations es, us it is possible that Sanskrit had both (both $\rightarrow$ as), whereas Greek generalised the os, and Latin, as a rule, the es $\rightarrow$ is (except perhaps in the u-stems, e.g. senatnos, and cp. partus from part-os (?) on an Inscription). Is it possible that the form -s occurs in met $+s \rightarrow$ nox (ep. риктós $=$ 'at might') and that the i is partly from the i -stems, i.e. from Stem i + Genitive s?

Allatives same as Genitives, except L. idd: for the possibility of Ablatives originally ending in od, ed, or $d, v$. the note at the end of this Appendix, and cp. mider the 0 -stems. Could not ed $\rightarrow i d$ ?

As to Latin icl, how can we conchusively prove that i is long in conventionid, louearid ete.? why should one give the Ablative here a different form from that which it has elsewhere? It is possible that proportional analogy (e.g. turri + Dative ai $\rightarrow \mathrm{i} \bar{i} \rightarrow \bar{i}=$ plus + Dative $\mathrm{ai} \rightarrow$ plurai, and turibus = phuribus) may have prodnced (?) phuri(d) on the model of tmri + ed $\rightarrow$ turi $(d)$.

As to a natural formation in Latin of ed or od (Ablative of consonant-stems) might it not ultimately have possibly become e or $o \rightarrow e$; for the 'law,' that final $d$ is dropped after long vowels only, has not enough data to be a Phonetic Law (it can at present only be a 'Phonetic Law' of the New School, and therefore not necessarily invariable): the influence of the monosyllables quod and quid and id, and possibly the accent, might have tended to preserve the final -d of aliquod, aliud etc., whereas Ablative -ed or -od of consonant-stems would have been more likely to have been influenced by the possible Ablatives with a long vowel, e.g. $\bar{a}(\mathrm{~d}), \overline{\mathrm{c}}(\mathrm{d}), \bar{e}(\mathrm{~d}), \bar{i}(\mathrm{~d}), \overline{\mathrm{u}}(\mathrm{d})$, where d perhaps disappeared. Or perhaps the -e of consonant-stems is due to a contamination of Ablative -ed or od with both or one of the two cases, Instrumental $\mathrm{a} \rightarrow \mathrm{e}$ and Locative $\mathrm{i} \rightarrow \mathrm{e}$. In this case e would have to be put down as at least partially Ablatival.

## Dative:

I.E. ui; S.e; G. au; L. $\bar{\imath}$ : all these seem natural: was the Greek -at, in the Infinitive and Aorist Imperative Middle (e.g. $\lambda \hat{v} \sigma a \iota)$ from the Stem + Dative ai only? could it not sometimes have been from an $\bar{a}$-stem, e.g. $\bar{a}+$ Locative $\bar{i} \rightarrow a \iota$ before a word beginning with e.g. s? or Locative from a consonant-stem by proportional analogy? e.g. possibly Dative, Stem $\bar{a}+a i \rightarrow \bar{i} i \rightarrow a$, $=$ Locative, Stem $\bar{a}+\mathrm{i} \rightarrow a$, and Dative Plural, $\bar{a}+a i+s \rightarrow \bar{a} i$ is $\rightarrow a \iota s=$ Locative Phral $\bar{a}+i+s \rightarrow a \iota s$, and Dative $o+a i+s$ $\rightarrow \overline{\text { öis }} \rightarrow o \iota s=$ Locative $o+\iota+\varsigma \rightarrow o \iota s$ : hence, possibly, an occasional creation, by proportional analogy, of
(a) Dative $\iota$ in the consonant-declension $=$ Locative $\iota$ : and, vice versa, of
(b) Locative $a t$ in the consonant-declension = Dative $a \iota$.

This would of course be helped out by the many identities of meanings (v. Appendix II., and the Cases, and the criticism of Monro, above).
L. i may possibly be occasionally Locative, transferred by proportional analogy from i-stems: e.g. phribus $=$ turribus, hence a new form *plurī (?) (Locative) beside turrī (Locative).
M. T.

## Locutive:

I.E. (men), (mēn), $i$; S. (an), $i$; G. ( $\mu \in \nu$ ), ( $\mu \eta \nu$ ), $i$; L. e:
I. E. (men) ; S. (an) ; $G .(\mu \in \nu)$ perhaps show the stem without case-suffix, and used originally either
(a) with a meaning as Locatival as that of other Locatives (e.g. those in -i) or
(b) without expressing a case-relation, but with a simple Locative casc-relation infused by the context: e.g. 'bird flies sky' $\rightarrow$ ' the bird flies in the sky.'

As to I. E. (mēn); G. ( $\mu \eta \nu$ ), it perhaps had the same history: possibly the relation of Stem mēn to Stem men was that of nominative $\bar{n}$, én to vocative on, en.
I. E. i; S. i; G. $\iota$; L. e would be natural: Greek $\iota$ may also be possibly Dative occasionally (v. Dative above), and Latin e may be, in origin, possibly Instrumental only, or Ablative only (v. Ablative, above), or sometimes one case, sometimes another, or a contamination of Instrumental and Ablative, or Ablative and Locative, or Locative and Instrumental cte., or sometimes one thing and sometimes another. If we look at the meanings snggested in the criticism of Allen and Greenough (above), the variety of possibilities (and which of them can we exclude ?) is simply bewildering.

## Instrumental:

I. E. a, (e?), bhi ; S. $\bar{\pi}$; L. e: blii may possibly be a Locative cnding (v. under o-stems).
S. $\bar{a}$ seems to come from the $\bar{a}$ - and o-stems (possibly $\bar{a}+a$ $-\bar{a}$, and $0+a \rightarrow \bar{a}$ ). For Latin e, v. also the Locative (above).

## Plural:

## Genitive:

I. E. бm; S. $\overline{\text { anm ; G. } \omega \nu \text { : L. } 1 \mathrm{um} \text { : }}$

Possibly the $\bar{o}$ might have been transferred from the 0 - and (?) ĩ-stems. L. um may possibly go back to ōm or um.

The -ium, which we sometimes find, seems due to proportional analogy-e.g. pluribus $=$ tmribus, hence phurimm (beside the old form plurum) to correspond with turrium.

## Locative :

## Y.E. $s, s u, s i$; S. su; G. $\sigma \iota,(\epsilon) \sigma \iota,(a) \sigma \iota:$

Here the Locative Plural might possibly arise from stem + Plural s (+Locative i or Locatival 11): as to the Greek stem, e.g. $\phi \rho \epsilon \sigma$ i, ep. above monder the Locative Plural of the $i$-stems. For the possibility of Sanskrit bhis, bhyas, and Latin bus being partially Locative, v. under o-stems.

## Dative-Ablative :

I. E. bh-, m-; S. blyges; L. bus: for these forms v. under the o-stems. bus may possibly be Ablatival: the i which we find in Latin before bus (e.g. pluribus) seems to have very likely been the Indeterminate vowel (plurbous) inserted between the stem and termination, perhaps in order to facilitate pronmeiation.

## Instrumental:

I. E. bhrl $(s), m_{\bar{u}}^{(1)}(s)$ S. bhis; Gr. $\phi \iota$ : for the possible Locative origin of the bhi v. under the o-stems, and for -bus v. id.

This is very very for from being a complete list of possibilities: perhaps, what we should never expect now-a-days has really happened, i.e. the real past fact is a thing which we should never be able (or dare) to gness; and, vice versa, what now-adays we should expect to have happened has not happened: for we are necessarily quite impregnated with modern forms of speech and modern ideas, and we necessarily know very little about the great problems as to origins of constructions, especially as to the great problem of how far distinctions of meaning were original, and how far they were originally denoted by distinct forms, and how far they were due to later developments, and how far forms were differentiated to denote one one meaning and one another meaning. (For developments which one perhaps would not a priori expect cp. the r of the Latin Passive, and amos $\rightarrow$ amor, and the Genitive Absolute, and the Aorist in $-\theta \eta \nu$.)

I do not wish it to be thonght that I am going back to the hap-hazard methods of the Old School: I wonld have as my
basis the very strictest Phonetic basis possible: I only suggest these developments as vague possibilities, and if any one will prove that certain early formations here suggested are impossible, because certain other early formations have developed differently under exactly the same conditions of accent and of the following letters etc., and liable to similar proportional analogies and contaminations, etc., I shall be only too ready to admit their impossibility: at present, I think that the majority of these suggestions, though they are not grounded on the basis of meanings (a basis rather like quicksand) yet are justifiable so far as possible developments of meaning are concerned.

## NOTE ON THE ORIGINAL ABLATIVE TERMINATION.

Brugmann, in lis Table of Nouns, gives the Genitive the same form as the Ablative (i.e. practically makes them one original case) in every declension except the o-declension: I suggest ny own conviction (i.e. that, except by forms like the(n) etc., the -d form, in one or more of its three Ablaut degrees of -ed, -od, -d, was possibly an original Ablative form in every Noun) merely as a possibletity, and no more. If it be admitted that the Genitive originally expressed any kind of relation in which a substantive might stand to a substantive notion in the way of definition, the question is something like this: Is it probable that the expression gmio patres (?) was originally clear in the sense of 'I go from my father' at a time when gmtis pôtres might have meant 'going to my father' as well as 'going from my father'? To my mind, the supposition, that it was, is about as probable as the supposition that túnтoнa had two original meanings as distinct as 'I strike myself' and 'I strike (someone else) for my own interests.' Of course I may be absolutely wrong, for our ideas are vastly different from Indo-European ideas.

I here suggest a few arguments out of many:
(a) The 'from -' notion is a case-notion which it seems to me must have originally required a form distinct from the form of that case which probably defined a substantive-notion in ANY kind of way, including the meanings of 'to' and 'at' ( v . the possible original
meaning of the Genitive). It must be remembered that probably 'prepositions' were rure in the early stages of language. We must also take into consideration the fact that possibly the notions of 'to' and 'at' had almost entirely separate forms of expression, in early times, so far as we can tell : why should we put the Ablativeform on a different footing ?
(b) With regard to the other case-endings in the singular of Nouns, it seems that (apart from extra suffixes like -bhi, -dhi, etc. and apart from the Ablaut-variations of the Genitive and its form in the o-declension, which looks like the common adjectival -io- added to a regular genitive in $-0+s$, $-\mathrm{e}+\mathrm{s}$ ) a regular ending runs through all the Declensions, Dative -ai, Locative -i, Accusative -m, Instrumental -a, ete. Why put the Ablative on a different footing? The main objection is: How comes it that we find in certain declensions in certain languages (e.g. Sanskrit and Zend) an ending -s with functions that are apparently Ablatival as well as Genitival? I should answer this question in more or less the same way as I should answer other similar questions, e.g. the question about the Instrumental in Greek.
(c) Neither Sanskrit nor Zend nor any other language of which we have written records is the original Indo-European language : some might hold that Vedic Sanskrit shows in its forms even more changes from Indo-European than Homeric Greek does-it certainly has gone through important changes of form, and, presumably, of Syntax also. (For instance, according to the current view the Relative stem io- was originally Demonstrative: in Homer apparently it is sometimes Demonstrative, but where in Vedic is it anything else but Relative?) Let us then consider some case-forms in Homer. First, as to Iustrumentals: in no declension, I think, can we certainly postulate an original unity of the forms of (1) Instrumental and Locative, or of (2) Instrumental and Dative, and again, in no declension, I think, can their ultimate identity as the result of 'Phonetic Law' be proved beyond question ; and yet, in no declension do we find Instrumental forms (possibly) except as stercotyped adverbs, e.g. (?) $\pi \hat{\eta}$; $\pi v \kappa v a$, which seem to have been preserved because they have, as it were, drifted from the main stream of the Instrumental on to a bank whereon they have escaped the fate of the main stream, which seems to have been (perhaps) swallowed up in the waters e.g. of the Locative and Dative. In Latin also a not very dissimilar disaprearance (possibly even more complete) may for all we know have been the fate of the lnstru-
mental: what exactly has happened, who can say? If we suppose, then, that in every Declension the Instrumental originally, or in very early Indo-European times required, or at any rate had, a separate form of expression in Greek and Latin to convey a more or less separate meaning, and that, in Greek at any rate, and conceivably in Latin also, this form regularly died out in $f^{\text {re-historic }}$ times, not because 'Instrumental' meanings had disappeared, but mainly because they could be expressed otherwise tham by the Instrumental, then why should we not suppose that the Ablative in Sanskrit etc. may have once had a distinct form of its own quite as much as the Instrumental, but so often disappeared mainly because the Genitive had come to express its meaning in certain decleusions? Secondly, as to the Dutive in the Greek con-sonant-declension : are we to say that it never had a form distinct from the Locative, in this great declension, merely because apparently in our earliest written records it scarcely exists, except in the Infinitives in -at, and the 'Aorist Imperative Middle'? Shall we put down $-\breve{\imath}$ as the original termination of the Dative in this Declension in Indo-European? or shall we not rather say that the Dative here, as elsewhere, originally required, or at any rate had, a separate form of expression in Greek and Latin to convey a more or less separate meaning, and that in this Declension in Greek it died out if it did die out (v. Dative of i-stems above) mainly because e.g. the Locative (partly the Genitive etc.) came to express its meanings? I will not prolong this note further: personally, I see nothing to disprove a suggestion that where, e.g. in Zend, the form in -s has Abatival is well as Genitival functions, it may have the Ablatival functions mainly because the Genitive has here come to clearly express meanings originally expressed by the form in - $d^{1}$.

[^17]
## Appendix II.

In the following examples I have tried to give the nearest equivalents, in English, of what are probably the present meanings of some Sanskrit case-usages. I have not given the Sanskrit chiefly becanse it would take up so much space, and would be meaningless to so many, and, besides, is so casy to obtain from the Grammars of Max Miiller (M.), Monier Williams (M.W.), Whitney (W.) aml from Nala, Books I.-XII. (N.), and a very few of Delbriick's selected Vedic hymms (V.).

It must be clearly understood that
I. The headings are not mutually exclusive (v. e.g. 'canse' and 'instrument' and 'circumstance').
II. The examples placed under some headings may seem to some inappropriately placed there: I should be the last to insist on the correctness of the arrangement; others could arrange the examples far better.
III. My knowledge of Sanskrit is very small, and so the instances here given necessarily represent very inadequately the valuable evidence which Sanskrit might afford in the hands of a good Sanskrit scholar, who could fill up many of the gaps.
IV. Of the most obvious constructions often one example only is given.
V. The headings are in no particular order.
VI. Examples are sometimes, but not always, repeated when they come under two or more headings.
VII. Examples are classified according to their present meanings and the cases are named almost entircly in accortance with the names given in Sanskrit Grammars. Until the results given at the end of Appendix I. be accepted as possibilities, I can hardly do otherwise, though the present method
of Classification is probably very incorrect and the importance of this list must not be over-estimated.

## 1. Specitication and Respect.

Instrumental: 'like the son of Aditi in brilliance' (N.), 'change in form' (M.W.), 'by birth' (M.W.), 'a king surpasses all beings in glory' (M.W.), 'by nature' (M.), 'you excel in that' (M.), 'blind of an eye' (M.).

Locative: ' like in beauty' (N.), 'supreme steadfastness in duty' (N.), 'as for the rest' (N.), 'was competent to prevent' (N.), 'I am of service in preserving the kingdom' (M.W.).

Ablative: 'like Manu in presence’ (N.).

## 2. Manner, Means, Instrument.

Instrumental: ' he sacrificed (with) the horse-sacrifice' (N.), 'let us play at dice' (N.), 'by her beauty she won fame' (N.), 'by thy righteousness thou art well shielded' (N.), 'death by the sword' (N.), 'blazing with beauty' (N.), 'thought out in her mind' (N.), 'went in that chariot' (N.), 'his heart was torn by anger' (N.), 'clad in half a garment' (N.), 'seized in the grasp' (M.W.), 'in great intimacy' (II.W.), 'he goes on horseback' (M.W.), 'he earried the dog ou his shoulder' (M.), 'hear with our ears' (W.).

Locative: 'did their utmost by revealing their marks' (N.), 'seized by the end of his garment' (N.), 'thou shalt conquer in the game of dice' (N.), 'misfortune with the dice' (N.), 'he was held by the skirt of his garment' (II.W.), 'sit thou on a cushion' (M.W.), 'he reclined on a seat' (II.W.), 'he seizes and drags him by the hair' (M.W.), 'he slays the enemy by means of his weak points' (M.), 'taking Sanijivaka by the left hand' (W.), 'be generous to him in retainers, in horses, in cattle' (W.).

Ablative: 'injured by a curse' (N.), 'by the fury of his thunderbolt he burst asunder' (W.).

## 3. Circumstance and Adverbials (v. also 2).

Instrumental: 'shrilly' (N.), 'with gentle voice he comforted' (N.), 'thou dealest falsely' (N.), 'on a certain condition, under certain circumstances (I will dwell with thee)' (N.)
'swiftly' (M.W.), 'in great intimacy' (M.W.), 'in human form' (M.W.), 'with the idea that' (M.), 'with great pleasure' (M.).

Locative : '(like a wife) in all sorrows' (N.), 'in sleep' (V.), 'confidence in you' (M.W.), 'with the consent of a son' (M.W.).

Ablative: 'altogether' (N.).
Genitive: 'confidence in women' (M.W.), 'dependence on me' (M.W.).

Dative: 'he is angry with his son' (11.W.).

## 4. Quality (v. 3).

Instrumental: 'woods with trees' (N.), 'mountain-mass with many peaks' (N.), ' of steadfast limbs' (V.).

Locative: (?) 'a chariot of horses ; a horse-chariot' (N.).

## 5. Accompaniment.

Instrumental : 'united unto steadfastuess' (N.), 'the father went with his son' (M.) [with plurals often $=$ 'among'].

Locative: 'I will be with thee' (N.), 'staying-with-me she will obtain...' (N.), 'to dwell with thee' (N.), 'yoked unto a chariot' (N.), 'may the Gods be in, or with, the assembly' (W.), 'animals abide with him' (W.), 'living with a teacher' (W).

Genitive: 'refuge with the gods' (N.).
6. Couse (v. also 2).

Instrumental: 'owing to your power no one saw me' (N.), 'I punish you on account of that transgression' (M.W.), 'throngh your favour' (M.W.), 'through pity' (W.).

Locative: 'maddened by play' (N.), 'by whose doing (? for whose sake) they did not show me hospitality' (N.), 'at my departure there might be doubt' (N.), 'in fury Indra slew the dragon' (W.).

Ablative: (?) 'for thy sake' (N.), 'from fear of the rod (they adhere to what is right') (N.), 'in her doubt she did not recognise' (N.), 'by whose wrath I have fallen' (N.), 'therefore ' (N.), 'he blames his son because of his entering inopportuncly' (M.W.), 'she eats the flesh from greediness' (M.).

## 7. Object or Purpose (occasionally Predicative).

Instrumental: (?) 'entered his service in chariotecring,'
(meaning) 'so as to be charioteer' (N.), 'for a hindrance' (II.W.).

Locative: 'choose in wedlock' (N.), 'was undertaken by me in order to help Nala' (N.), 'turned away so that he should forsake' (? so that he actually forsook) (N.), 'hastening to go' (N.), 'hasten to seek' (M.W.), 'him we beg for friendship' (W.), 'this means was devised by me for bringing thee hither' (W.), 'a spy is (serves) for examining the territory of one's enemies' (almost Predicative) (M.W.).

Dative: 'go to do this' (M.W.), 'making an arrow for hurling' (II.W.), 'not a herdsman for cheating, to be cheated' (M.W.), 'arms and books (lead) to renown' (M.W.), ' neetar (leads) to death, is death' (M.W.), 'the king was not to her liking' (M.W.).
S. Place to which, etc.

Instrumental : 'put on-to a balance' (W.).
Locative: 'go thither' (N.), 'let thy mind turn to them' (N.), 'invited to the svayanvara' (N.), fell on-to the limbs' (N.), 'let fall on his shoulders' (N.), 'may he sink down into hell' (N.), 'went thither (where...)' (N.), 'turning to thee' (or 'resting on thee,' ep. 'in him we have our being') (N.), 'having sent to and set among my relatives' (N.), 'sat down on the earth's surface ' (N.), 'fell to earth ' (N.), 'the eyes of men go towards the sun' (V.), 'put your hand on-to the end of his tail' (M.W.), 'he darts arrows at the enemy' (M.), 'that truly goes to the gods' (W.), 'putting on the shoulder' (W.).

For ' time for which,' ep. 'fixed for a certain time' (N.).
Ablative: (with $\bar{a}$ ) 'going (from the mountains) to the ocean' (W.), and similarly of 'time up to which.'

Genitive: 'as messenger to whom I am wanted' (N.), 'the road to Vidarbha' (N.), 'unexpected ills come upon corporeal beings' (M.W.), 'the road to the eity' (W.).

Dative: '(with which) thou shootest at the impions' (W.).
9. Place from which, etc.

Ablative: 'from behind' (N.), 'at a distance from thee' ( V.$)$, 'far from the village' (M.).

Genitive: 'these I desire to have from Rudra' (V.), 'he is
blessed from whom suppliants do not depart in disappointment' (M.W.), 'far from the village' (M.).
10. Place where, etc. (v. also 2 and s).

Instrumental: 'went in that chariot' (N.), 'clad in half' a garment' (N.), 'thou hast hidden thyself in the bushes' (N.), seized in the grasp' (N.), 'he goes on horseback' (M.), 'he carried the dog on his shoulder' (M.), 'in the middle of his task ' (V.).

Locative: 'the tirst chapter in (of) the Nala-story' (N.), 'sitting on seats' (N.), 'like the stars in (of) heaven' (N.), (?) 'he placed the wood on his back' (M.W.), 'he was held by the skirt of his garment' (M.W.), 'he reclined on a seat' (M.W.) 'sit thou on a cushion' (M.W.), 'taking Sañjivaka by the left hand' (M.).

Ablative: ' the mountain is at (or to) the East (of the village)' (M.), 'the wind spoke in the sky' (W.).

Genitive: 'a bamer over that forest' (N.), 'wheresoever in Kurukstetra' (W.), 'in what spot on earth he may be born' (W.).
11. Space or Place along or through which.

Instrumental: 'went through the air' (N.), 'they brought him by water' (W.), 'come hither by god-travelled paths' (W.).

Locative: 'through the whole world' (N.), 'proclaimed through the city' (N.), 'how can I go through the lonely wood?' (N.).
12. Time when (v. also 13 and 14).

Instrumental: 'she does not lie down (at night), nor by day ' (N.).

Locative: 'at just that time' (M.W.).
Genitive: 'at this time in the day' (W.), 'by night' (W.), 'by day' (W.).
13. Time within which (v. also 12 and 14).

Instrumental: 'in a moment' (N.), 'she does not lie down (at night), nor in the day-tine' (N.), 'grammar is learnt in twelve years' (M.), 'I wish to go to Vidarbha in one day' (W.).

Ablative: 'within three fortnights' (II.W.), 'within seven days' (M.).

Genitive: 'eight times within the month' (M.).
14. Time after which (v. also 13).

Instrumental: (?) 'Grammar is learnt after twelve years' (M.), 'and they after a long time attained adolescence' (W), 'in a moment' (N.).

Locative: 'after twelve years he saw' (N.), 'after a very long time' (N.), 'he will dine again after three days' (M.).

Ablative: 'after separation from the body' (M.W.), 'since his arrival' (M.W.), 'seen after a long time' (W.).

Genitive: 'after a few days' (M.W.), 'to-day is the tenth month since my father's death ' (M.).

## 15. Time theroughout which (v. also 12 and 13).

Instrumental: 'she does not lie down (throughout the day) or night' (N.), 'having traded for twelve years' (M.W.).

Locative: sometimes with negatives.
Genitive: 'for a long time' (M.W.).

## 16. Absolute.

Instrumental: 'he went after this speech' (N.), 'do it with undoubting heart' (N.), 'spoke with eyes overtlowing (with tears)' (N.), 'with his heart delighted' (N.), 'with Dvāpara for companion' (N.), 'with voice indistinct (from tears)' (N.), 'only with thy senses gone (if they were gone) couldst thon leave me' (N.), 'what would happen to me were that done,' originally 'by the doing of that thing' (N.), 'with me at hand thon needest feel no anxiety' (W.).

Locative: 'with consent given by us' (N.), 'there being no harm done ' (N.).

Genitive: (?) 'as they wandered about he caught one of them' (N.), (?) 'their gaze fell on her form, and did not leave it as they gazed’ (N.), (!) 'as Puskara played his kingdom was won from him' (N.), (?) 'when thou art weary I shall not soothe thy sorrow' (N.), (?) 'as I weave my task let not my thread be cut' (V.), 'while he thus spoke, the cow came from the forest' (W.).
17. Recipient or Person Benefited and 'Remoter' Object' etc. (v. also 26).

Locative: 'he made known to Nala' (N.), 'having promised to us' (N.), 'should help Nala' (N.), 'they did not show hospitality to me' (N.), 'to make good unto me...' (N.), 'thon behavest unto me' (N.), 'may he be gracious minto our steed ' (V.), 'a teacher imparts knowledge to an intelligent pupil' (M.), 'upright towards friends' (M.W.), 'a hundred good offices are thrown away upon the wickel' (M.W.), 'this is the time for battle' (M.W.), 'a king who is equal to (a match for) a great enemy' (M.W.), 'horses fit for the journey' (M.W.), 'he applies his mind to virtue' (M.W.), 'sovereignty is suited to you' (M.W.), 'equal to toil' (M.W.).

Ablative: 'on the day previous to that of the Chraddha' (M.W.).

Genitive: 'thou tellest me the way' (N.), 'one should not give to one what one promises to another' (M.W.), 'I will do thee a service' (N.), 'they show hospitality to him' (N.), 'to them he did bonour' (N.), 'doing what is mpleasant to the gods' (N.), 'evil shall not happen to thee' (N.), 'having given him (gifts)' (N.), 'let her punishment be great' (N.), 'there is food for me' (N.), 'medicine for a sick man' (N.), ' one's own life is dear to oneself' (ML.W.), 'a hundred yojanas is not far for one carried away by thirst for gain' (almost 'if one is carried away') (M.W.), 'what is muknown to the wise ?' (M.W.), 'what offence have I committed against the king?' (M.W.), 'what can this man do to us?' (M.W.), 'he is detestable to his ministers' (II.W.), 'giving advice to others is easy (to all men') (M.W.), 'worthy of happiness' (M.W.), 'competent for duty' (ML.W.), 'rather like the moon' (MI.W.).

Dative: 'this lump of meat is produced for a hundred sons' (M.W.), 'he sets his mind on their destruction' (M.W.), 'he owes money to Devadatta' (M.W.), 'he promises a cow to the Brahman' (M.W.), 'he gives sweetmeats to his son' (M.W.), 'that is pleasing to me' (M.W.), 'I will declare this to my pupils' (M.W.), 'be gracious as a mother to her sons' (W.), 'show the bow to Rama' (W.), 'Hari is equal to the demons' (M.W.), 'he is angry with his son' (M.W.), 'I have no hopes
for success' (M.W.), 'reverence to Ganeça, health to thee' (M.W.), 'he makes known all to the king' (M.W.).
18. Agent.

Instrmental: ‘it was said by him' (M.).
Locative: (?) 'I am not to be slain by thee' (N.), and perhaps occasionally with plurals.

Genitive:(?) 'the steeds much loved by Nala' (N.), 'may he be slain by me' (N.), 'devised by physicians' (N.), 'came into the power of (was overcome by) love' (N.), 'what was spoken by thee' (N.), 'what is mnknown to the wise?' (M.W.), 'meat cooked by Nala' (M.W.).
19. Members of a cluss: e.g. with Superlatives.

Instrumental: 'people well-read in books are best as-com-pared-with-ignorant people' (M.W.), (?) 'a hero dearest even-compared-with-Kinti' (M.W.).

Locative: 'among the Yakṣas was none with such beanty' (N.), 'best of, or among, men' (N.), 'the most powerful of men' (M.W.), 'of all the sons Rāma is dearest to me' (M.).

Ablative: 'a store of grain is the best of all stores' (M.W.), 'he slew one of the pair' (W.), 'one of them' (W.).

Genitive: 'pearl of maidens' (N.), 'best of bipeds' (N.), 'which of us?' (W.), 'great among plants' (W.).
20. According to.

Instrumental: 'I chose according to right' (N.), 'according to rule' (M.W.), 'he acts according to my opinion' (M.W.).

Ablative: 'they came according to Bhima's command' (N.).
Dative: 'the king was not (according) to her liking' (M.W.).

## 21. Price and Stake.

Instrumental: 'for five Purīnas he became a slave' (M.W.), 'they fight for great rewards' (M.W.), 'a man should always protect himself even at the cost of his wife and wealth' (M.), '(let Çabatà be given me) for a hundred thousand cows' (W.).

Genitive: 'time for playing for gold' (N.), 'the game for Danayantī' (N.).
22. $=$ Against.

Instrumental: 'play against Nala' (N.), 'vying with the strong' (M.W.).

Locative: 'they were wroth against the king' (M.W.).
Genitive: 'what offence have I committed against the king?' (M.W.), 'saw an occasion against him' (N.).

Dative: 'he is angry with his son' (M.W.).
23. Object of emotion.

Locative: 'affection for Niṣadha's king' (N.), 'faithfuhess to Nisadha's King ' (N.), 'devotion to playing ' (N.), 'lemiency towards an enemy' (M.W.), 'compassion upon all creatures' (W.).

## 24. Possessor and defining a substantive.

Locative: 'the first chapter of the Nala-story' (N.), 'in whom is skill' (N.), 'the canse of a woman's chastity ' (M.W.), 'the canse of his modesty' (M.W.), 'the canse of the decline or prosperity (of men)' (M.).

Genitive: 'a book is mine' (M.), 'let her punishment be great' (N.), (?) 'there is food for me ' (N.).
25. Source.

Ablative: 'from sin ruin results' (M.W.).
Genitive: 'one ought not to accept a present from any one' (M.W.), 'these I desire to have from Rudra' (V.).
26. (Many of these examples have already been given, v. 17.) With words expressing
(1) Ruling.

Locative: 'lord among the people of Niṣadha' (N.), 'thon art king of this forest' (N.).

Genitive: 'king among the people of Nisatha' (N.), 'king of Niṣadha' (N.), 'him who mles over this world' (M.W.), 'death overcomes us' (M.W.).

## (b) Difference.

Instrumental: 'there is a great difference between you and the ocean' (M.W.).

Ablative: 'other than thee' (N.), 'differently from what one has heard' (M.W.), 'Krsụa is different from Govinda' (M.).

Genitive: 'there is a great difference between the master and the servant' (M.W.).
(c ; cp. also 19 above) Comparison.
Instrumental: ' not to be compared with the dust of their feet' (N.), 'dearer than life' (M.W.). It is even used with a positive and not merely a comparative: ' his wife is dear to him as-life ' (M.).

Locative: 'a king who is a match for a great enemy' (M.W.).

Ablative: 'more mfortmate than that misfortune' (N.), ' mind is more powerful than strength' (M.W.); (and even with a positive) (M.W.).

Genitive: 'equal to him' (N.), 'rather like the moon' (M.W.), 'there is no one more unfortmate than I' (W.).

Dative: 'Hari is a match for the demons' (M.W.).

## (d) Being pleased or angry.

Instrumental: 'a low person is satisfied even with little' (M.): so with verbs meaning 'disgusted’ (M.): cp. also 'having pleased by his words' (N.), 'let us not anger by our worship' (V.).

Locative: 'she finds pleasure in eating' (N.), 'delighted at thy words' (N.), 'pleased at sacrifices' (N.), 'he delights in the good of all the world' (M.W.), 'they were angry with the king' (M.W.), 'and even at an offence committed there is no anger in me' (W.).

Genitive: 'pleased by, or at, Damayanti' (N.), 'fire is not satisfied with fuel' (M.W.), 'he was angry at him' (W.), 'enjoy the juice ' (W.).

Dative: 'he is angry with his son' (M.W.): with words of 'hating' (M.).
(e) Being cmazed.

Instrumental: 'amazed at the brightness' (N.), 'amazed at the excellence of his beanty' (N.).

## (f) Obeying.

Genitive: 'obeying Puṣkara' (N.).

## (g) Eating and drinking.

Instrumental: 'feeding on water alone' (N.).
Ablative : (?) 'having drunk of it' (M.W.).
Genitive: 'drink the Soma' (W.).
(h) Fearing.

Ablative: 'fear of tusked animals' (M.W.).
Genitive: 'she did not fear anything' (N.).
(i) Seeing.

Genitive: 'having observed her' (V.).
(j) Disregarding, being anxious (ep. t).

Locative: 'disregard for advice' (M.W.), 'what anxiety about dying in battle ' (M.W.).

Ablative: ' he neglects his own interests' (M.W.).
(k) Filling.

Instrumental: 'they fill with moise' (N.), 'filled with the tigers among men' (N.), 'a jar full of water' (M.W.).
( $l$ ) Hearing.
Ablative: 'having heard that from the troop' (N.).
Genitive: 'Indra listened to Vasisṭha' (W.), 'learn from me' (W.).
(m) Depriving etc.

Instrumental: 'deprived of ornaments' (N.), 'destitute of ornaments' (N.).

Genitive : (?) 'stealing the king's eyes' (N.).
(n) Sepuration.

Instrumental: 'separated from my husband' (N.), 'separated from thee' (N.), 'he camnot endure separation from his father' (M.), 'they cleanse him from evil' (W.).

Ablative: 'he ceases from wickelness' (M.W.), 'he ceased from speaking' (M.W.), 'a virtuous son saves his father from hell' (M.W.), 'a friend guards one from evil' (M.W.), 'free from grief' (N.).
M. т.
(o) Want etc.

Instrumental: 'there is no need of me ' (M.W.).
Locative: ' what need is there of a boat' (M.W.).
(p) Skill and ability.

Locative: 'skilled in arms' (M.W.), 'wise in trifles' (M.W.), 'Rāma is skilful at playing dice' (M.).

Genitive: 'understanding the duties of a king' (W.).
Dative: 'he has the power to kill me' (M.W.).
(q) Trusting.

Locative: 'confidence in Niṣadha's king' (N.).
Genitive: 'no one puts his trust in you' (M.W.).
(r) Envying.

Genitive: 'I envy men who possess eyes' (M.W.).
Dative: (MI.).
(s) Desiring.

Genitive: 'he should desire content' (M.W.), 'the soul longs for love' (W.).
( $t$ ) Remembering, cp. ( $j$ ).
Genitive: 'that he may think of me' (W.), 'do not remember heaven' (M.W.).
(ii) Forgiving.

Genitive: 'forgive them' (M.W.).
(v) Striving and inciting.

Locative: 'he strives to suppress evil-doers' ( (IL.W.).
Dative: 'he sets his mind on their destruction' (M.W.), 'he incited them to the murder of their mother' (M.W.).
(w) Making triul of.

Locative: 'make trial of Vāhuka' (M.W.).
(x) Blaming (cp. (d).)

Locative: 'I will lay the blame on you' (M.W.).
(y) Swearing by.

Instrumental: 'I swear by Bhārata' (M.).
(z) Employment etc.

Instrumental: 'what is to be done with that cow?' (M.), 'what has a man, who is well, to do with medicines?' (M.W.).

Locative: 'engaged in the acquisition of wealth' (M.W.), 'do not busy yourself about other people's affairs' (IL. IV.), 'he is addicted to objects of sense' (M.W.) ; 'he applies his mind to virtue ' (M.W.).
(A) Being ashamed.

Iustrumental (M.).
(B) Giving (a thing).

Genitive: 'give (us) immortality' (W.).
(C) Sharing.

Locative : 'he made to share in his prosperity' (V.).
(D) Telling and showing.

Locative: 'he made known to Nala' (N.).
Genitive: 'thou tellest me the way' (N.).
Dative: 'show the bow to Rāma' (W.), 'he makes known all to the king' (M.W.).
(E) Advising, teaching.

Locative: 'a teacher imparts knowledge to an intelligent pupil' (M.).

Genitive: 'giving advice to others is easy (to all men') (M.W.).

Dative: (?) 'I will declare this to my pupils' (M.W.).
(F) Giving (to a person).

Locative: 'a teacher imparts knowledge to an intelligent pupil' (M.), cp. 'should help Nala' (N.), 'a hundred good offices are thrown away upon the wicked' (M.W.).

Genitive: ' one should not give to one what one promises to another' (M.W.), 'having given him gifts' (N.).

Dative : 'he gives sweetmeats to his son' (M.W.).
(G) Promising (to a person).

Locative: 'having promisel to us' (N.).
Genitive: 'one should not give to one what one promises to another' (M.V.).

Dative: 'he promises a cow to the Brähman' (M.W.), cp. 'he owes money to Devalatta' (M.IV.).
(H) Helping, Benefiting, etc.

Locative: 'should help Nala' (N.), 'they did not show hospitality to me' (N.), 'to make good unto me...' (N.), 'may he be gracious unto our steed ' (V.).

Genitive: 'I will do thee a service' (N), 'they show hospitality to him' (N.).

Dative : 'be gracious as a mother to her sons' (W.).
(I) Injuring etc.

Locative: ' they did not show hospitality to me' (N.).
Genitive (?) 'doing what is umpleasant to the gods' (N.), (?) 'evil shall not happen to thee' (N.), 'what offence have I committed against the king?' (M.W.).
(J) Fitness etc.

Locative: (?) 'this is the time for battle' (M.W.), 'a king who is a match for a great enemy' (M.W.), 'horses fit for the journey' (M.W.), 'sovereignty is suited to you' (M.W.), 'equal to toil' (M.W.).

Genitive: 'worthy of happiness' (M.W.), 'competent for duty' (M.W.).

Dative: 'he is rendered fit for immortality' (M.W.).
(K) Honouring and saluting.

Locative : cp. 'thou behavest unto me' (N.).
Genitive: 'to them he did honour' (N.).
Dative: 'reverence to Ganeça, health to thee ' (M.W.).
(L) IIoping.

Dative: 'I have no hopes for suecess' (M.W.).
(M) Pleasing.

Dative: 'this is pleasing to me ' (M.W.).

## Appendix III.

## On the possible original identity in Greek and, to a certain extent, in Latin, of the Future Indicative and the Present (Aoristic) Subjunctive ${ }^{1}$.

The discussion here is not by any means a full one: but if its results hold good we shall cease to be surprised that e.g.
(a) the Future Indicative in Greek can be used in the majority of constructions where the subjunctive is used, if we may to a certain extent disregard the expression or nonexpression of ä ${ }^{\prime} \nu$ or $\kappa \epsilon(\nu)$ :
(b) there is no futme optative in Homer:
(c) scholars find a great deal of difficulty in deciding whether certain Homeric forms (c.g. кє $\chi o \lambda \omega \sigma \epsilon \tau \alpha \iota$ ) are Future Indicative or Aorist Subjunctive. (They usually decide for one exclusively of the other.) If the wearying disputes (about these latter forms) in grammars and notes on Homer be reduced in quantity, if not completely stopped, something will have been done to prevent much waste of paper and patience, and much wear and tear of type.

A few words must be said by way of preface, to prevent misapprchension :

The suggestions are only suggestions of possibilities: dogmatism is out of place, for, e.g.
(1) The person-endings are so obscure: e.g. when did the first person singular end in - $\bar{o}$ (cp. $\phi \in \in \rho \omega$, fero), and when in (-o)-mi (as so often in 'Aeolic'), and what was the difference

[^18]between -men and -mes (-mos due to Ablant variation) in the first person plural? (In the latter case perhaps we can only say that 'Acolic' and 'Doric' preferred to level forms to $-\mu \in \varsigma$, and 'Ionic' to $-\mu \in \nu$, and Latin to $-m o s \rightarrow-m u s$. In this case we may compare, fur the alternation of n and s , ai( F$) \in \nu$ beside $a i(\mathbf{F}) \epsilon \varsigma$, and $\chi \epsilon \rho \iota o \nu \rightarrow \chi \epsilon i \hat{\rho} о \nu$ beside $\chi \epsilon \rho-\iota \sigma-\epsilon \varsigma \rightarrow \chi \epsilon i \rho o u s$, or is it pussible that n was once primary, and s sccondary?)
(2) It is doubtful if the two divisions of II. and III., which are given below, were originally distinct.
(3) The analytical method is inexact, strictly speaking: an aorist indicative was not formed by taking a root, prefixing an angment, adding an s, and a person termination, but was modelled by (e.g. proportional) analogies from a few primitive types. The analytical method of splitting up words like $\grave{\epsilon} \cdot \tau v \pi \cdot \sigma . \mathrm{m}_{\mathrm{o}}$ is often misleading, because it obscures proportional analogies ${ }^{1}$. Still, if used carefully, it is convenient, and probably indispensable.
(4) There has been an enormous amount of levelling in pre-historic times, in order to bring words connected with one another by some common meaning (e.g. futurity) into formal connexion with one another-(somewhat as members of a club may wear the same colours) : so that e.g. we may wrongly attribute to an original third person singular subjunctive a vowel which really was not originally in that third person, but was extended to it from ( $(a)$ other third persons singular, or ( $b$ ) other persons in the subjunctive, especially in the same tense. The difficulty is to tell whence the analogy has started, as, in Latin especially, a grain of mustard-seed like the Passive -r has been known to grow so enormously that some have stigmatised the true theory about it as ridiculous: on the other hand, we may go too far in the other direction, and e.g. put down to an analogy like the one just suggested a vowel which was original.
(5) Next, we must realise that sometimes we camot tell

[^19]which of two things has actually happened. To take a quite imaginary instance, suppose that to denote an act as a necessity there were originally two forms $a$ and $b$, which were quite distinct: It is possible that
I. Each originally had a distinct meaning, e.g. $a$ moant a future act regarded as a certainty, and $b$ an act which was incumbent, and a duty; these meanings might meet sometimes, and here the distinctions between $a$ and $b$ would disappear, and, because either form might be used indifferently here, it came about that either form might be, by analogy, used indifferently in some constructions where originally only one form could be used : e.g. a might be sometimes used to denote a duty and $b$ to denote a future certainty: again, in other constructions the gulf between $a$ and $b$ may have grown wider rather than narrower. Or else
II. $a$ and $b$ were originally identical in meaning, expressing a necessity, and both could be used to express either a future certainty or a duty: then, we may almost say 'by chance,' in a large proportion of the constructions denoting a future certainty $a$ happened to be used, and in a large proportion of the constructions denoting a duty $b$ happened to be used : and so there grew up a feeling that the distinction of meaning was really not incidental to, but actually expressed by, the distinct forms, and so in newly created constructions futurity was regularly expressed by $a$, duty by $b^{1}$. Then came a process like that described in I.; in spite of the partial differentiation there would be some constructions where either form might be used indifferently, and from these neutral grounds or stepping-stones a might have analogically extended over some constructions in which the use of $b$ was by that time stereotyped, and vice versa : add to this the fact that in certaiu constructions, sanctioned by long usage, and having their source in the original identity of $c$ and $b$, rather than in analogical extension beyond what was sanctioned by long usage, "sometimes expressed duty and $b$ futurity.

We may, with advantage, apply the same method (the

[^20]imaginary method), mutatis mutandis, to two always distinct forms $a$ and $\beta$; for 'necessity' we may substitute 'an action,' and for 'futurity' we may substitute 'an act regarded as in progress,' and for 'duty' we may substitute 'an act regarded as an act, or as a complete whole.'
(6) Lastly, what about Phonetic Laws? The results of the discussion in Appendix V. are almost the only positive results in this whole work which I consider certain: briefly, they are that we have not sufficient data for knowing how far the 'Phonetic Laws' of the New School are to be applied, i.e. how far the forms, on the strength of which a Phonctic Law is 'passed,' occurred under exactly the same conditions as the forms which we wish to know about, or rather occurred under so many similar conditions as to resist the diverse conditions, and to produce the same ultimate form. The question is too long to be treated here; but, in case this dictum be thought heresy, it may be merely suggested that to formulate a Phonetic Law as a certainty presupposes a knowledge of all the important conditions under which all the words which we bring under this law, or put beyond the pale of it, were spoken by millions of men for thousands of years, and that even 'heresy' is better than the assumption of such information!!! 'To take one instance, viz. a discussion of what the form amés is. Can it be optative from amā-i-is (cp. sis superseding siès on the analogy of the plural simus)? have we data in Latin for the change of $\overline{\mathrm{a}} \mathrm{i} \mathrm{i}-\mathrm{i}$ ? ? We have aì (two syllables) in Plautus, but we can scarcely say whether this is an original form (stem $\bar{a},+$ Dative $a i \rightarrow \bar{i})$ or whether the $\bar{i}$ comes from the Locative of the odeclension ete; v. Appendix I. p. lii. Again, did $\overline{\mathrm{a}} \rightarrow$ ae phonetically, or did ae (Locative) extend over the functions of both $\bar{a} s$ (Genitive) and $\bar{a} \bar{i}$ (Dative), so that the preservation of the furm $\bar{a} \overline{1}$ became unnecessary, and $\bar{a} \overline{1}$ was later on only used as an archaism, and so that we cannot tell what its final form would have been by phonetic development? Again, would the $\bar{a} i-\bar{i}$ of amāi-is develope in the same way as this $\bar{a} \bar{i}$ of naturā̀ ? Again, would not the final -s constitute a different Phonetic condition, if we suppose it to have (possibly) such an effect on a forms mens $\bar{a}+$ is $\chi \omega \rho \bar{a}+$ is (Locative) as to produce mens $\bar{a}$

+ is $\chi \omega \rho \bar{\alpha}+$ is $\rightarrow$ mensais $\chi \omega^{\prime} \rho a \iota s \rightarrow$ mensis beside the singular form without -s mensae $\chi$ '́ $\rho_{\imath}$ ? Again, was the word- and sentence-accent demonstrably the same throughout the history of the word amāi-is as throughout that of any other word or words for which we have 'Phonetic Laws'? The list of queries might go on almost ad infinitum! We might next, if we felt we had time, consider what the possible Optatives amai-iēs (cp. s-iēs, è $\left.\sigma \iota \eta \varsigma \rightarrow \epsilon^{\prime \prime} \eta \varsigma\right)$ and amāi-ois (ep. ф'́ि $\rho o \iota s$ ) would have beeome, phonetically, and add to queries like those above a further one:
 the original formation which, beside $\phi$ 'िo $\quad \mu \epsilon \nu$, and because of the relation of $\delta o i \eta \tau \epsilon$ to $\delta o i \eta \mu \epsilon \nu$ or $\delta o i ̀ \tau \epsilon$ to $\delta o i ̂ \mu \epsilon \nu$, was levelled to фépoute? so that we may add another possible optative amāi-eis: and then we should not have given all the optative possibilities, for we have not yet considered e.g. the possibilities of Heteroelisis, i.e. of parallel stems amoi, am-(root aorist), am + thematic vowel (root aorist), etc., which might survive only or mainly in the optative (cp. Plautus for e.g. verbs in -ēre where Classical Latin has -ĕre): then what would subjunctive forms have become? And was there ever a contamination of the forms of subjunctive and optative? The fact is, we do not know, and perhaps we never shall know, exactly how far one method of forming optatives and subjunctives (e.g. optative -ié-, $\bar{i}$, oi, ei, ete.) was more frequent than another method, either in early times, or owing to the levelling system.

If then we realise (as we must sooner or later) that these are only some of the difficulties, we shall be less likely to walk into and through this Indian jungle with the idea that it is a little fiold with a trodden path through it: as a matter of fact, in the present state of our phonetic data as to the Latin subjunctive and optative, perhaps there are almost as many possible paths here as a small jungle admits of, if we consider that by walking between two trees, instead of past both of them, we alter our path: we might almost as well try to dogmatise as to which was exactly the first path taken by the first man who walked through the jungle, and by every body who followed subsequently, on the strength of the present appearance of the
jungle, and on the analogy of other jungles which were not exactly the same as this one.

Some of the possibilities may now be suggested ${ }^{1}$ as to the Greek types.

1. $\tau v \pi-\sigma \omega \rightarrow \tau \dot{\psi} \psi \omega$

to which we may add other forms (e.g. perhaps $\tau \epsilon \theta \nu \eta \kappa-\sigma \omega$ ) due perhaps to proportional analogies.
2. $\dot{j} \lambda-\epsilon \sigma \omega \rightarrow \dot{o} \lambda \epsilon \omega \rightarrow \dot{j} \lambda \hat{\omega}$
$\grave{o} \lambda-\epsilon \sigma о \mu a \iota \rightarrow \dot{o} \lambda \epsilon \sigma \mu a \iota \rightarrow \dot{o} \lambda o \hat{v} \mu a \iota$.
3. $\phi \epsilon v \gamma-\sigma-\epsilon \sigma-о \mu a \iota \rightarrow \phi \epsilon v \xi є о \mu a \iota \rightarrow \phi \epsilon \nu \xi \circ \hat{v} \mu a \iota$.

This form 3 may perhaps be at once disposed of as due to a contamination of 1 and 2: for formations containing almost or quite the same element twice over, cp. dicturum esse [where -rum from (?) esum almost $=$ esse], $\dot{\epsilon} \pi \epsilon \in \epsilon \sigma \sigma \iota$ [where originally forms like $\ddot{\epsilon} \pi \epsilon \sigma-\sigma \iota$ and $\pi o \delta-\sigma \iota \rightarrow \pi o \sigma \sigma i$ extended the $-(\epsilon) \sigma \sigma \iota$ to e.g. $\chi \in \dot{\epsilon} \rho-\epsilon \sigma \sigma \iota$, whence it returned to $\dot{\epsilon} \pi \epsilon \sigma-\epsilon \sigma \sigma \iota \rightarrow \dot{\epsilon} \pi \epsilon \epsilon \epsilon \sigma \sigma \iota]$.

Latin types are

1. legām legēs leget, etc.
2. amābo amābis amābit, etc.: cp. monēbo, and early Latin audībo.

This form 2 may perhaps be at once disposed of as a later formation to denote (on the whole) a future meaning rather than those many other meanings of which a subjunctive like feranm, ferās, ferat was capable (of which not the least important were 'result' ' characteristic' 'canse' etc.). Of the varions explanations only one is accepted by the New School, I think, viz., that the bo represents that bhuio which originally meant 'become,' etc., and which bas cognates in fui and Greek тéфика. (The imperfect -bām would perhaps be the aorist of this form.) The meaning seems perhaps not so satisfactory, from our point of view, as could be wished: but this is not enough to condemn

[^21]the theory, and we find a similar combination of what was very probably a stem + some part of the verb 'be' or 'become' developing a future meaning in bodhitāsmi, 'I shall know,' and dicturum (v. Appendix I. p. lxii., footnote). Could bō bis bit etc. be the subjunctive of a non-thematic bhu- (cp. é $\phi v$ in Greek)? The Phonetics are (pāce the New School) not nnobjectionable, as we scarcely know for certain what would happen to -bhuio under these conditions ${ }^{1}$.

In trying to explain these formations as Subjunctives (with the exception of the -bo forms) I shall have to mention, incidentally, other subjunctive forms which will be more fully treated of in Appendix IV.

Perhaps originally future time required to be denoted:
Problem I. Was it expressed by
(a) a distinct form, or two or more distinct forms, which originally expressed future time only, or
(b) a form, or two or more forms, not originally confined to expressing future time (perhaps also expressing e.g. (?) possibility or a command or concession according to the context, the tone, and particles etc. ?), but to a great extent differentiated to express future time: i.e. of forms denoting e.g. both futurity and (?) possibility and command and concession (ideas which are often not distinct in negative and other sentences) some were partially differentiated to express mainly a future act, some to express mainly a command etc.

Leaving this unsettled, we may suppose that the idea of

[^22]future time had one or more fairly distinct ways of being expressed, either in Indo-European times, or very soon after.

Problem II. There are various ideas about an act, which are more or less distinct now: e.g. the act may have been repeated or attempted, or it may have been regarded simply as an act and as a complete whole, or as going on, or as resulting in a certain state of affairs: with regard to such ideas as these in future time, were they originally expressed by (a) distinct future forms, or by (b) future forms with many meanings all or most of which meanings might potentially have been expressed by any one of the forms equally well, but which, to some extent, became respectively associated with certain forms? And (c) How far did these distinctions tend to disappear?

This problem too we must to a great extent leave unsettled.
Supposing that, possibly, the idea of future time had one or more ways of being expressed, we can imagine how there was originally, or (perhaps still more easily) how there grew up, a distinction, in some constructions only, between the ideas of
A. Futurity (mainly negatived by oủ, non).
B. Command, Duty, etc. (mainly negatived by $\mu \dot{\eta}$, nē).

The word 'necessity' will almost express the meaning between the two ideas of futurity and obligation.

It is also possible that in some constructions this difference of meaning would
(a) (?) originally, or by differentiation, be denoted by separate formations, partially at any rate: this might have been to some extent the case in Greek, and Latin: or
(b) require the creation of a new form mainly to express A. (futurity): this might have been to some extent the case in Latiu (cp. Celtic).

It seems that there were perhaps two methods, perhaps three, of forming Subjunctives or Futures.
I. Where there was no 'Thematic vowel' immediately preceding the terminations in the Indicative, the Subjunctive had a Thematic rowel

WAS the future tense the subjunctive mood? xciii
A. Greek-the bases are those of the sigmatic and rootaorists: for which see Appendix IV., and sce the same Appendix for the divisions of $\omega^{\circ} \lambda \epsilon \sigma a$ into $\ddot{\omega} \lambda \cdot \epsilon \cdot \sigma \cdot a$ and $\ddot{\omega} \lambda \cdot \epsilon \sigma \cdot a$, and for the proof that the aorist was not confined to past time.

Indicative.
Secondary and Past Active.
$\dot{\epsilon}-\tau v \pi-\sigma-\left\{\begin{array}{l}\text { m } \\ \mathrm{s} \\ \tau \\ \mu \epsilon \nu \text { or } \mu \epsilon \mathrm{s} \\ \tau \epsilon \\ n \tau\end{array}\right.$
Primary Active. $\dot{\epsilon} \sigma$ or $\dot{\epsilon} \sigma-\sigma-\left[\right.$ the $-\sigma-\left\{\begin{array}{l}\mu t \\ \sigma \iota \\ \sigma \iota \\ \mu \epsilon \nu \text { or } \mu \epsilon s \text { etc. }\end{array}\right.$

Secondary and Past Active. $\dot{\omega} \lambda \cdot \epsilon \cdot \sigma \cdot\left\{\begin{array}{c}\mathrm{m} \text { etc. (same as } \\ \text { for } \dot{\epsilon} \cdot \tau v \pi \cdot \sigma \cdot \mathrm{~m})\end{array}\right.$

Subjunctive.
Primary Active.

$$
\left(\mathrm{c} v \pi-\sigma-\left\{\begin{array}{l}
0-\mu \iota \text { or } \omega \\
\epsilon-\sigma \iota \\
\epsilon-\tau \iota \\
o-\mu \epsilon \nu \text { or } \mu \epsilon \mathrm{s} \\
\epsilon-\tau \epsilon \\
o-\nu \tau \iota
\end{array}\right.\right.
$$

Primary Middle.

$$
\dot{\epsilon} \sigma-\text { or } \dot{\epsilon} \sigma-\sigma-\left\{\begin{array}{l}
o-\mu \alpha l \\
(\text { cp. } \ddot{o} \psi \rho \alpha a l) \\
\epsilon-\tau \alpha l \\
o-\mu \epsilon \theta a
\end{array}\right.
$$

Primary Active.
$\delta \lambda \cdot \epsilon \cdot \sigma-\left\{\begin{array}{c}o \cdot \mu \iota \text { or }-\omega \text { etc. (same as for } \\ \tau v \pi \cdot \sigma \cdot o \cdot \mu \iota \text { or } \tau \cup \pi \cdot \sigma \cdot \omega)\end{array}\right.$

As to the development in the Indicative, the $-a$ - was finally extended from the 1st person singular ( $\mathrm{m} \rightarrow a$ ), and the 3rd person plural ( $\mathrm{n}_{0} \tau \rightarrow a \nu$ ), and the 'Infinitive' $\lambda \hat{v} \sigma-a \iota($ ? $)$, to all persons except the 3 rd Singular, which took the $-\epsilon(\tau)$ from the Thematic tense (e.g. $\dot{\epsilon} \cdot \tau v \pi \cdot \epsilon \cdot \tau)$. But this process is not complete in Homer's time, where some forms (of the Root-Aorist as well as of the Sigmatic-Aorist) hover between the analogy of the 1st person singular and of the 3rd person plural, and the analogy of the Thematic Tense.

As to the Aorist Subjunctive here with the Thematic vowel, it seems that it stood on the same footing as the Present Indicative with the Thematic vowel, and that whatever causes prodnced Indicative $\tau \dot{\pi} \pi \tau \omega$, $\tau \dot{\pi} \pi \tau \epsilon \iota \varsigma$, тúm $\tau \epsilon$, ctc., produced also $\tau \dot{u} \psi \omega, \tau u ́ \psi \epsilon \iota \varsigma, \tau u ́ \psi \epsilon \iota$, etc. In the three plural persons there seems no difficulty, and the Indicative $\tau \dot{\pi} \pi \tau \omega$ (cp. Latin ferō) $\tau v \pi \tau \epsilon \sigma \iota \rightarrow \tau v \pi \tau \epsilon \ell, \tau v \pi \tau \epsilon \tau \iota \rightarrow \tau v \pi \tau \epsilon \sigma \iota^{1}$ perhaps changed thus: the relation of the Imperfect and Aorist Indicative $\epsilon^{\epsilon} \tau v \pi(\tau) o \mu$,

[^23]étv $\tau(\tau) \epsilon \varsigma$, and (?) of the Subjunctive $\tau \dot{v} \pi \omega$, $\tau v \pi \eta \varsigma$ or $\tau \dot{\prime} \pi \eta \varsigma$, to $\tau \dot{\pi} \pi \tau \omega, \tau v \pi \tau \epsilon \iota$ produced a 2 nd person singular $\tau v ́ \pi \tau \epsilon \iota \varsigma$, like the regular phonetic 2ud person singular $\tau v \pi \tau \in \iota^{1}$ and at the same time like the Indicative $2 n d$ person ${ }^{\prime \prime} \tau v \pi(\tau) \epsilon \varsigma$, and (?) the Subjunctive $\tau v \pi \eta \varsigma$ or $\tau u ̛ \pi \eta \rho$ : then the relation of $\notin \tau v \pi(\tau) o \nu$,
 or $\tau \dot{\prime} \pi!!(\tau)$ to $\tau \dot{\prime} \pi \tau \omega \tau \dot{\tau} \pi \tau \epsilon \iota \varsigma$ produced an obvious proportional $\tau \dot{\pi} \pi \tau \epsilon \iota(\tau)$. (The plural also had its influence on the proportional analogies.) This will apply to $\tau u ́ \psi \omega, \tau u ́ \psi \in \iota \varsigma, \tau u ́ \psi \in \iota$ also.
B. In Latin there is much more uncertainty: the endings ( $s, t$, etc.) scem secondary endings, but the stem is doubtful: i.e. we cannot tell how far it is aorist only, and how far aorist + perfect, for we can scarcely say whether Latin formed its typical perfect with the vowel o rather than e (cp. $\pi \epsilon i \theta \omega, \pi \epsilon^{\prime}-$ $\pi o \iota \theta a$, etc.), or vice versa (cp. фєú $\boldsymbol{\gamma} \omega$, $\pi \dot{\varepsilon} \phi \in v \gamma a$ ), whether the latter forms were due to levelling with the present or not (e.g. $\pi \epsilon ́ \phi o u \gamma a \rightarrow \pi \epsilon ́ \phi \epsilon v \gamma a$ so as to be like $\phi \in \dot{\varepsilon} \gamma \omega$, , фєv́ ${ }^{\prime}$ oual, etc.) : and if we did know this, it would be almost equally hard (except for the New School) to dogmatise as to the Phonetic resultant of the oform ${ }^{2}$.

It is possible that the stems are those of
(a) the sigmatic aorist + the perfect: e.g. amāucs, moneues, audiues, if $u$ is a sign of the perfect ${ }^{3}$ :
(b) the sigmatic aorist (+ the perfect, if the stem-vowel is wholly or partially from the perfect) + the sigmatic aorist s repeated (cp. above on $\phi \epsilon v \xi o \hat{v} \mu a \iota$, є่ $\pi \epsilon \in \epsilon \sigma \sigma \iota$, dicturum esse, etc., for
${ }^{1}$ Was this differentiated and used as a Middle? Cp. the not absolutely impossible equation legere $=\lambda \epsilon \gamma \epsilon \sigma \iota$ (not always $\lambda \epsilon \gamma \epsilon \sigma 0 \rightarrow \lambda \epsilon \gamma \epsilon 0 \rightarrow \lambda \epsilon \gamma \circ v$ ).

2 e.g. if uoiko $\rightarrow$ oîo-s and nieu-s, and noino $\rightarrow$ oîvo-s and uinum, then one might suggest uoid- $\rightarrow$ oîo a and uīd-ī: but if we consider that Latin may have preferred ueiko, ueino to the o-form, and that initial oi seems to become e.g. oe in foedus and (?) $\bar{u}$ in pūnire and unus, then an equation of uīd-i to oî $\alpha-\alpha$ needs a query, whereas the equation of uìdi to ueid- seems a little more probable, and here again, was ueid- perfect as well as aorist? [Cp. $\pi о \delta \bar{\delta}$ ped-; $\lambda \epsilon \gamma о \nu \tau$ - legent-.]
${ }^{3}$ It is possible that the u is the u which appears in the Sanskrit third person, e.g. dadāu: but possibly it is partly due to heteroclisis of éstems and $\bar{a}$-stems with u-stems (ep. kri in Sanskrit showing the theme kuru beside the perfect cakāra): the analogy of perfects of u-stems (e.g. statui) might also have been at work.
the repetition of an element: $\dot{\epsilon} \pi \epsilon(\sigma) \epsilon \sigma \sigma \iota$ would be especially interesting as a parallel if the $s$ of abstract nowns be identical with the $s$ of the aorist): e.g. deikses:
(c) the sigmatic aorist-some words here may possibly come really under ( $a$ ) : e.g. meides.

Possibly the original endings added to these stems might have been, in the Subjunctive:
$\bar{o}$ (ep. Greek $\omega$ ) or o-m-
$\mathrm{e}-\mathrm{s} \rightarrow$ is (cp. genes-es $\rightarrow$ generis)
e-t $\rightarrow$ it
(?) $0-\mathrm{mos}$
$\mathrm{e}-\mathrm{te},+\mathrm{s}$ (from the 2nd person singular and 1st person plural), $\rightarrow$ itis
(?) o-nt
Were omos, ont, the early forms? i.e. did Latin, like Greck, use o before m, and e elsewhere, as Thematic vowel, or did it use e frequently? If we assume that Latin may possibly have here used the vowels 0 , e just as Greek did, then did omus $\rightarrow$ umus (with $u$ perhaps representing a sound between $u$ and $i-c p$. maxumus and maximus ete.), and then imus beside is, it, itis, or did unaccented o regularly $\rightarrow i$, just as final $o$ is supposed to
 $=$ sequere)? or did a contamination of optative imus, and the subjunctive form (e.g. omus or umus) with a short vowel, produce a form ǐmus?

As to int, is it due to a levelling with is, it, itis, or is from the optative int ${ }^{1}$ ?

When s between vowels becomes retc. we might possibly have amāuer-, monuer-, audīuer-, dixer--, vīder--, $+\bar{o}$, is, it, imus, itis, int.

For the Optative v. Appendix IV.
We may now say a few words on Roby's 7 pages as to whether dixerit (aliquis) is subjunctive or indicative: he assumes (absolutely regardless of forms) that ( 1 ) dixer-o, is, it, is Future Perfeet Indicative, and (b) dixerim, is, it, is Perfect

[^24]Subjunctive: he decides for dixerit here being (a). But if (a) should prove to be in form (therefore in meaning) aorist (sometimes + perfect) Subjunctive always, or in some forms Optative, and (b) the same, except for the first person, which seems to be Optative, then what can be the exact value of proving (a) to be future perfect Indicative?

It seems that this system (I.) of forming the Subjunctive perhaps prevailed more in Latin than in Greek.
II. Where there was a Thematic vowel immediately preceding the terminations in the Indicative the Subjunctive lengthened it: perhaps the Indo-European long of $\breve{o}$ was $\bar{o}$, and of e e was ē.

Of course here again I am only suggesting some possibilities: it is doubtful whether II. was originally distinct from III., or whether II. arose from III., etc.
(A.) Greek.

Indicative.
Secondary and Past Active.

$$
\dot{\epsilon-\tau \nu \pi-}\left\{\begin{array}{l}
o-\mu \\
\epsilon-s \\
\epsilon-\tau \\
o-\mu \epsilon \nu \text { or } o-\mu \epsilon s \\
\epsilon-\tau \epsilon \\
0-\nu \tau
\end{array}\right.
$$

Subjunctive. Primary Active.
$\tau \vee \pi\left\{\begin{array}{l}\omega \text { or } \omega-\mu \iota \\ \eta s(l) \\ \eta \tau(c) \\ \omega \mu \epsilon \nu \text { or } \omega \mu \epsilon s \\ \eta \tau \epsilon \\ \omega \nu \tau(\iota)\end{array}\right.$
$\tau \dot{u} \pi \omega$, $\tau \dot{\pi} \pi \omega \mu \epsilon \nu, \tau u ́ \pi \eta \tau \epsilon$, perhaps need no explanation: the question is, Were the other forms primary here, e.g. $\tau v \pi \eta \sigma \iota$, $\tau v \pi \eta \tau \iota, \tau v \pi \omega \nu \tau \iota \rightarrow \tau u ́ \pi \omega \sigma \iota(?)$ ? In this case the forms of $\tau v \pi \eta \sigma \iota$ $\rightarrow \tau v \pi \eta \iota \rightarrow \tau \dot{v} \pi \eta$ (was this latter form differentiated, and used as subjunctive middle? ), and $\tau v \pi \eta \tau \iota \rightarrow \tau v \pi \eta \sigma \iota^{1}$ were possibly changed to $\tau \dot{v} \pi \eta-\varsigma, \tau u \pi \eta(\tau)$ (which became $\tau \dot{\prime} \pi \eta(\tau)$ because of тúmins etc.), on the model of étvтєs, є̇ $\tau v \pi \epsilon(\tau)$, becanse of the relation of $\tau \dot{v} \pi \omega \mu \epsilon \nu$ to $\dot{\epsilon} \tau \dot{\prime} \pi т \rho \mu \nu$ and of $\tau \dot{\prime} \pi \eta \tau \epsilon$ to $\dot{\epsilon} \tau \dot{\prime} \tau \epsilon \epsilon \tau \epsilon$ : or were the forms here secondary, i.e. $\tau v \pi \eta \varsigma, \tau v \pi \eta$ (with the $\iota$ subscript from the Indicative $\tau \dot{\prime} \pi \tau \epsilon \iota \varsigma, \tau u ́ \pi \tau \epsilon \iota$ (?) ), and the primary $\tau v \pi \tau \omega \nu \tau \iota \rightarrow \tau u ́ \pi \tau \omega \sigma \iota$ on the model of the Indicative $\tau v \pi \tau o \nu \tau \iota$

[^25]was the future tense the subjunctive mood? xcvii
$\rightarrow \tau \dot{\pi} \pi \tau o v \sigma \iota$ ? We might possibly have here тúm $\omega$, тú $\pi \eta \varsigma \varsigma, \tau u ́ \pi \eta$, $\tau v ́ \pi \omega \mu \epsilon \nu, \tau v ́ \pi \eta \tau \epsilon, \tau v ́ \pi \omega \sigma \iota$.
(B.) Latin.

Indicative.
Secondary (?) and Present.

| $\left\{\begin{array}{l} \mathrm{o}-\mathrm{m} \text { or } \overline{\bar{o}} \\ \mathrm{e}-\mathrm{s} \rightarrow \text { is } \\ \mathrm{e}-\mathrm{t} \rightarrow \text { it } \\ \mathrm{o}-\mathrm{mos} \rightarrow \text { imus (either Phone. } \\ \text { tically, because unaceented o } \\ \quad \rightarrow \mathrm{e} \rightarrow \mathrm{i}, \text { or by levelling to } \\ \text { is, it, itis) } \\ \text { e-te }(+\mathrm{s} \text { from 2nd person singu- } \\ \text { lar and lst person plural) } \rightarrow \\ \text { itis } \end{array}\right.$ | $\left\{\begin{array}{l} \operatorname{leg}\left\{\begin{array}{l} \bar{\omega}-\mathrm{m} \text { or } \bar{o} \\ \overline{\mathrm{e}}-\mathrm{s} \\ \overline{\mathrm{e}}-\mathrm{t} \rightarrow \mathrm{et} \\ \bar{u}-\mathrm{mos} \rightarrow \overline{\mathrm{o} m u s} \\ \\ \overline{\mathrm{e}}-\mathrm{te}+\mathrm{s} \rightarrow \text { etis } \end{array}\right. \\ \end{array}\right.$ |
| :---: | :---: |
|  | ( $\bar{u}-n \mathrm{n}$ |

If early Latin hat the same difference as Greek in the use of the Thematic vowel (i.c. o before $m$, e otherwise), then perhaps legōmus, legōnt $\rightarrow$ legēmus, legēnt by being levelled to legès legét legétis: or else possibly early Latin often used e rather than 0 : or else the e may really be, at any rate sometimes, Optative in origin ${ }^{1}$, originating perhaps only e.g. when oi followed $m$ or nt, but extended by the levelling process. We might possibly have here leḡ̄ legēs legēt ( $\rightarrow$ legĕt) legēmns legētis legēnt $\rightarrow$ legent.

## III.

The Subjunctive was formed perhaps by
(i) (?) putting a between the stem (without the Thematic vowel) and the termination:
${ }^{1}$ The chief phonetic evidence for the change of oi is the Locative (and (?) Dative) plural in is: but then (a) perlaps this i comes from the singular i (where original oi or ei was not followed ly s), whereas the phonetic development of ois might otherwise have been possibly different (ess (?)), or again (l) the plural is may possibly go back to ei +s (cp. oíktı) and so be no cvidence at all for ois $\rightarrow$ is: and (c) granting the possibility of ois $\rightarrow$ is, might not the following letter in oim , oi-s, oi-t, oi-mos, oi-te(s), oi-nt constitnte a different condition, and if any one of these forms $\rightarrow \overline{\bar{c}}$, the $\bar{e}$ might possibly spread throughout the tense by the levelling process-(for the different effect of $m$ and $s, c p . e m \rightarrow c m$ beside es $\rightarrow$ is).
(A.) Greek.

$$
\tau v \pi-\left\{\begin{array}{l}
\bar{\alpha}-\mu(\imath) \text { or } \bar{\alpha}-\omega \\
\bar{\alpha}-s(\imath) \\
\bar{\alpha}-\tau(\imath) \\
\alpha-\mu \epsilon \nu \text { or } \bar{\alpha} \mu \epsilon s \\
\bar{\alpha}-\tau \epsilon \\
\bar{\alpha}-\nu \tau(\imath)
\end{array}\right.
$$

The secondary endings might have produced $\tau v \pi \eta \mu \rightarrow \tau v \pi \eta \nu$ or $\tau \dot{\tau} \pi \omega, \tau v \pi \eta \varsigma, \tau v \pi \eta(\tau), \tau v \pi \eta \mu \epsilon \nu, \tau \cup ́ \pi \eta \tau \epsilon, \tau v \pi \eta \nu$. Then $\tau v \pi \eta \varsigma$
 $\tau v \pi \tau \epsilon \iota$, and $\tau v \pi \eta \mu \epsilon \nu, \tau v \pi \eta v$ (3rd person phral) might have $\rightarrow \tau \dot{\prime} \pi \omega \mu \epsilon \nu, \tau v \pi \omega \nu \tau \iota \rightarrow \tau \dot{v} \pi \omega \sigma \iota$ on the model of e.g. $\tau \dot{\pi} \pi \tau \sigma \mu \in \nu$, титтоут८ $\rightarrow$ ти́ттоขб८.

The primary endings might have produced $\tau v \pi \eta \mu \iota \rightarrow \tau \dot{\tau} \pi \omega-$ $\mu \iota$ by association with étu $\pi \pi \nu$, $\tau u ́ \pi \tau \omega$ etc. or $\tau u ́ \pi \omega$, $\tau \cup \pi \eta \sigma \iota$
 etc., $\tau v \pi \eta \tau \iota \rightarrow \tau v \pi \eta \sigma \iota \rightarrow \tau v \pi \eta(\tau)$ by association with $\tau u ́ \pi \eta$ s $\tau v ́ \pi \tau \epsilon \iota \varsigma(?)$ and ${ }^{\prime} \tau v \pi(\tau) \epsilon(\tau)$ etc., $\tau \dot{\prime} \pi \eta \mu \epsilon \nu \rightarrow \tau \dot{v} \pi \omega \mu \epsilon \nu$ by association with é év $\tau о \mu \epsilon \nu$ and $\tau \dot{v} \tau \tau о \mu \epsilon \nu$ etc., $\tau \nu \pi \eta \nu \tau \iota \rightarrow \tau \nu \pi \omega \nu \tau \iota$ $\rightarrow \tau \dot{\pi} \pi \omega \sigma \iota$ by association with $\tau v \pi \tau o \nu \tau \iota \rightarrow \tau \dot{\prime} \pi \tau o v \sigma \iota$.

So that here we might have, possibly, тúm $\omega(\mu \iota), \tau \dot{\pi} \pi \eta \varsigma, \tau \dot{\pi} \pi!$, $\tau \dot{u} \pi \omega \mu \epsilon \nu, \tau \dot{\prime} \pi \eta \tau \epsilon, \tau \dot{\tau} \pi \omega \sigma \iota$.
(B.) Latin.

```
leg ( \grave{a}-m
        i-s
        \overline{a}}\textrm{t}->\mathrm{ at
        \overline{a}-mos }->\mathrm{ ãmus
        a}\mathrm{ -te ( + s from 2nd person singular and 1st person plural) }->\mathrm{ attis
        \overline{a}-\textrm{nt}
```

or else by
(b) putting $\check{y}$ before or after the Thematic vowel:
(A.) Greek.

$$
\tau v \pi=\left\{\begin{array}{l}
o-\alpha-\mu(\imath), \text { or } \alpha-\omega, \text { or } \omega \cdot \alpha(?) \\
\epsilon \cdot a-s(\iota) \\
\epsilon-\alpha-\tau(\imath) \\
o-\alpha-\mu \epsilon \nu \text { or } o-\alpha-\mu \epsilon s \\
\epsilon-\alpha-\tau \epsilon \\
o-\alpha-\nu \tau(\imath)
\end{array}\right.
$$

becoming, if secondary, $\tau v \pi \omega \nu$ or $\tau u ́ \pi \omega, \tau v \pi \eta \varsigma, \tau v \pi \eta(\tau), \tau u ́ \pi \omega$ $\mu \epsilon \nu, \tau v ́ \pi \eta \tau \epsilon, \tau v ́ \pi \omega \nu(\tau)$ : then possibly $\tau v \pi \eta \varsigma \tau v \pi \eta(\tau) \rightarrow \tau v ́ \pi \eta \rho$ $\tau \cup \pi \eta \eta(\tau)$ by association with $\tau \dot{\prime} \pi \tau \epsilon \iota \varsigma \tau \dot{\pi} \pi \tau \epsilon \iota(\tau)$, and $\tau u \pi \omega v$ (3rd plural) $\rightarrow \tau v \pi \omega \nu \tau \iota \rightarrow \tau v i \pi \omega \sigma \iota$ by association with $\tau v \pi \tau o \nu \tau \iota$ $\rightarrow \tau \dot{\pi} \pi \tau o v \sigma \iota:$
if primary, $\tau \dot{\pi} \pi \omega \mu \iota$ or $\tau v \dot{\prime} \pi \omega, \tau v \pi \eta \sigma \iota \rightarrow \tau v \pi \eta \iota \rightarrow \tau v \pi \eta \rightarrow \tau v ́-$ $\pi \eta \varsigma$ (by being associated with e.g. є́ $\tau v \pi(\tau) \epsilon \varsigma$ ), $\tau v \pi \eta \tau \iota \rightarrow \tau v \pi \eta \sigma \iota$ $\rightarrow \tau v \pi \eta(\tau)$ (by being associated with e.g. єं $\tau v \pi(\tau) \epsilon(\tau), \tau \dot{v} \pi \omega \mu \epsilon \nu$, $\tau \dot{u} \pi \eta \tau \epsilon, \tau \dot{v} \pi \omega \sigma \iota)$.

The same might possibly have resulted had a been put before the Thematic vowel.
(B.) Latin.

$$
\text { leg }\left\{\begin{array}{l}
\text { o-a-m or a-o-m } \\
\text { e-a-s or a-e-s } \\
\text { e-a-t or a-e-t } \\
\text { o-a-mos or a-o-mos } \\
\text { e-a-te }(+s) \text { or a-e-te }(+s) \\
\text { o-a-nt or a-o-nt. }
\end{array}\right.
$$

I will not venture to say what these forms might have become, for we know practically nothing about e.g. final and unaccented ea or ae before $t$ or $s$ : it is conceivable that e.g. ae or ea might possibly $\rightarrow \bar{a}$ in certain positions or into $\bar{e}$ in certain positions, and so spread the $\overline{\mathrm{a}}$ or $\overline{\mathrm{e}}$ : but our data are inadequate.

The suggestions might be extended enormonsly, especially if we suppose a third possible formation (instead of or besides (a) and (b)) e.g. a put before or else after the Thematic vowel.

However, the suggestions here will be sufficient to show that possibly
(a) Greek 'Future Iudicatives' are almost all Sigmatic Aorist Subjunctives: a few forms like é $\delta-o-\mu a \iota$ ( cp . Sanskrit
 cp. erimns, ő $\psi-o-\mu a \iota$ are root-aorists Subjunctive:
(b) Latin 'Future Indicatives,' apart from the forms in -b-, may be sometimes root-aorist Subjunctive, or possibly occasionally Subjunctives of the progressive or imperfect tense:
on the other hand we camot here exclude the possibility of some form of an Optative series, e.g. logoim, legois, legoit,
legoimos, legoite $+s$, legoint, resulting in é (from oi), and spreading this e to some or all other forms by the levelling process:
(c) Latin 'Future Perfects Indicative' may be sometimes Aorist or sometimes Aorist and Perfect Subjunctive: there again we camot exclude the Optative form e.g. it $\rightarrow \mathrm{it}$, int $\rightarrow$ int, and perhaps in other persons by proportional analogies.

It seems that in Greek the $-\sigma \omega,-\sigma \epsilon \iota \varsigma,-\sigma \epsilon \iota$ form became to a great extent (but far from entirely, and to a less extent than the Latin (am) és, ét) used to express futurity, whereas the $-\omega,-\eta s,-\eta$ form became similarly used to express e.g. a command, and was differentiated after Homer's time still more by having $\ddot{u} \nu$ with it, and $\mu i j$ to negative it, in many constructions, as opposed to the $-\sigma \omega,-\sigma \epsilon \iota \varsigma,-\sigma \epsilon \iota$ form withont the $\ddot{a} \nu$ and with ov to negative it, in most constructions.

It seems that the aorist-subjunctive $\tau u ́ \psi \omega,-\eta s,-\eta$ is either a new formation modelled on tenses which had the Thematic vowel in the Indicative e.g. $\tau \dot{u} \pi \tau \omega,-\eta \varsigma,-\eta$, or else it possibly was a doublet of $-\sigma \omega,-\sigma \epsilon \iota \varsigma,-\sigma \epsilon \iota$, corresponding to a form of the Sigmatic Aorist Indicative with the Thematic vowel.

## Appendix IV.

## The Moods and Tenses.

In Appendix III. it has already been shown how to a certain extent the distinction between moods and tenses is arbitrary: e.g. the 'Future 'Tense' (of the Indicative) possibly is not altogether distinct from the Aorist Subjunctive in Greek and Latin, and also the Aorist Optative in Latin: I have also shown there and elsewhere how extremely difficult and hazardons it is to map out a scheme of original forms and meanings, and of subsequent phonetic and syntactical developments. As to the Moods, I an not here considering the 'Imperative' (q.v.) which may possibly be, in origin, sometimes Accusative or Dative of an abstract verbal noun (e.g. $\lambda \hat{v} \sigma o v, \lambda \hat{v} \sigma a l$, and (?) imperatival legiminī: the Indicative legimin̄ may be participial in origin), sometimes the pure verbal theme, with or without the Thematic vowel, and so nearer in its origin to an exclamation, sometimes the same with tōd ('henceforth') alded to it (e.g. $\lambda v ́ \epsilon, \lambda v \epsilon \in \tau \omega(\delta)$, lege, duc, legitō(d)) and sometimes formations modelled on these
 and legunto : legito $=$ legunt: legit). It has been ubserved that the Imperative sometimes becomes equivalent to (a) $\delta \rho \hat{a} \sigma a \iota$ $\delta \in \hat{\imath}$, ср. ồ $\sigma \theta$ 'ò $\delta \rho \hat{a} \sigma o v$ and $v$. the Introduction, or (b) the Sub-
 $\delta \epsilon ́ \kappa \epsilon \in \tau о \iota \kappa a \tau a \lambda \epsilon \in \xi$, if $\epsilon i$ is not exclamatory but means 'if', or (c) almost the protasis of a contitional sentence, ср. фраһє каi $\pi \epsilon \pi \rho \kappa \dot{\xi} \epsilon \tau a \iota$.

Neither am I here considering the Infinitive: some of its possible origins from an abstract verbal nom in the bative (e.g. $\lambda \hat{v} \sigma a \iota$, morī), suffixless' 'Locative' (e.g. $\lambda v ́ \epsilon \iota \nu$ ), or possibly Locative and Instrmmental etc. (e.g. legere) have alreally been
treated of under the Infinitive (q.v.). There remain the Indicative, Subjunctive, and Optative, and the tenses.

The following remarks are very tentative, and are meant to suggest the problems rather than to attempt the solutions of them.

First as to some of the ideas which we can now-a-days distinguish in at least some constructions:
I. An act may be regarded as actually taking place or as a duty etc. at a time contemporancous with, or previous to, or future to, the time of ( $a$ ) the speaker, (b) an act which the speaker mentions:
II. Such an act may be regarded simply as an act or a complete whole, or as in progress, or as begun or attempted, or as repeated, or as finished or resulting in a certain state of affairs, or as a general truth, etc.

The problems are:
(a) to what extent were the distinctions between these ideas originally felt, and to what extent did they not come to be felt till later on, and to what extent did they tend to increase or to disappear as time went on? and
(b) to what extent were they originally expressed each by one or more distinct forms, and to what extent were they expressed by many forms, of which one or more came later on to be more or less set apart to convey one idea, and others to convey other ideas, and to what extent did the distinction between these ideas subsequently decrease, so as to lead to the partial or total disappearance of one form, or to a contamination of two or more forms, and to what extent was such a result due to the meanings having been originally identical ?

We have as our basis various forms. In the present state of our Phonetic data it is often impossible to say to what group of words a form really belongs, or if it belongs entirely to any one group. When we compare two or more forms with one another we sce that they stand in various degrees between conveying absolntely identical meanings and conveying absolutely different meanings.

We must steer midway between the Scylla of saying that
every form originally hand its own single definite meaning, and that no other form originally had that same definite meaning, and the Charybdis of saying that every form originally meant almost any number of things, and that when one form does convey a meaning distinct from another form, it is entirely the result of later differentiation and not a trace of original difference of meaning.

Considering how hard it must be to think as Indo-Europeans thought, and as early Greeks and Latins thought, and how liable we must be to coast along near to Scylla when we should be just skirting Charybdis (Charybdis is as a rule shumned, but probably is really far safer than Seylla), I shall avoid dogmatism almost entirely, and state as a vague suggestion of some possibilities the following consideration ${ }^{1}$ of what forms originally denoted, or came to denote, the abuve distinctions of ideas.

Perhaps a verbal root was originally of a flexible nature and could adapt itself to form not only verbs but also other parts of speech: by aid of modifications and additions it could become, e.g. a substantive, or an alljective, or a finite tense. In itself it was not necessarily contined e.g. to forming verbs, or to denoting past time ouly-such ideas originally came by implication from the context, and by implication or explicitly from e.g. the angment (or sign-post which warned the hearer that past time was being spoken of), from the modifications of the theme itself (according to where the accent fell), and the addition of personterminations with or without some further element (e.g. i to denote futurity, perhaps), and from certain particles etc. in the sentence (e.g. words meaning 'perhaps,' 'already,' etc.).

We have, then, to consider the flexible and alaptable nature of the verbal root: we have to consider the variety of forms, and whether this variety (or the accent which producel it) was originally a mole of expressing various shades of meaning (e.g. the begiming, progress, completion, or repetition of the act), or whether such sharles of meaning were non-original, but be-

[^26]came in course of time associated with special forms as the result of differentiation.

We have also to consider the same 'uuestion about the variety of those further clements which may be called affixes (such as the 'Thematic' vowel, the $-\nu \nu$ - of $\delta \epsilon^{\prime} \kappa-\nu \nu-\mu \epsilon \nu$, etc.).

Before we decide, we must realise that we may err by being cither
(a) too definite (if we assign original differences where there were none) or
(b) too vague (if we do the reverse).

I shall here consider mainly the different modes of distinguishing an act as
I. (a) simply an act, or a complete unity, or
(b) as in progress, or
(c) as represented by the state of affairs in which it results.
(I shall not consider other distinctions, such as an act repeated, or attempted, ctc.)
II. ( $c$ ) as contemporaneous with, (b) previous to, (c) future to, the time of the speaker's words or of some act which the speaker mentions.
(I shall not consider other distinctions, such as a command, duty, possibility, or desire, etc.)

What was the exact difference between the stems $\pi \epsilon \iota \theta$-, $\pi \epsilon \pi \sigma \iota \theta-, \pi \iota \theta$, and $\pi \epsilon \iota \theta \sigma-\rightarrow \pi \epsilon \iota \sigma-$ ? It is not a complete answer merely to say that the difference was originally one of accent: for we may suggest that a vowel was not pronounced e.g. in a higher tone just for fun, but that the different accent perhaps, at least sometimes, expressed a different shade of meaning.

It is not impossible that $\pi \iota \theta$ - and $\pi \epsilon \iota \theta-\sigma$ differed from oue another very slightly if at all : viz. that $\pi \iota \theta$ - denoted, or came to denote, the verbal notion in its most simple form, as an act or acts regarded merely as anl abstract whole, whereas $\pi \epsilon \epsilon \theta-\sigma$ differed from $\pi \iota \theta$ mainly in the addition of that $(\epsilon) s$, which denoted an abstract nom, and which appears e.g. in $\gamma \in \nu \in \sigma-$ [Latin geneses $\rightarrow$ generis, Greek $\gamma \in \nu \epsilon \sigma o s \rightarrow \gamma^{\prime} \boldsymbol{v} \boldsymbol{\nu} \boldsymbol{\sigma}$ s]: thus the
relation between the root and sigmatic aorist $\dot{e} \pi \iota \theta \circ \nu(\tau)$ and $\epsilon \pi \epsilon \iota \sigma \mathrm{nt} \rightarrow \epsilon \in \pi \epsilon \iota \sigma a \nu$ would be parallel to that between morī (probably dative of the abstract mor-) and amā-(e)s-i etc. $\rightarrow$ amāre (Lncative etc. of the root + abstract (e)s). As to the Thematic vowel, when it appears in the root-aorist or in the sigmatic aorist (cp. Homer for root-aorists withont it, and sigmatic aorists with it), it would be very hard to decide whether it is more accurate to say that it belongs to the stem, or to the interval between the stem and termination, or to the termination itself, and whether it made any difference to the sense or not: e.g. was the vowel $\epsilon$ of $\omega^{\prime \prime} \lambda \epsilon \sigma a$ part of the stem $(o \lambda \epsilon)$ or of the aorist suffix ( $o \lambda-\epsilon \sigma-$ ), or did its insertion prevent the stem $o \lambda$ and the aorist suffix from clashing together? and did the tense meaning of $\omega^{\prime} \lambda \epsilon \sigma a$ difter from that of $\epsilon^{\prime} \kappa \epsilon \lambda \sigma a$ ? It is possible that the root- and sigmatic- aorist stems denoted (originally or later on) an act as a complete whole. It is not impossible that partly owing to differentiation from the rootaorist ( $\pi \iota \theta-$ ) or the sigmatic aorist ( $\pi \epsilon \iota \theta \sigma^{-}$) stems like si- sto-, $\delta \iota-\delta \omega$ - etc., and $\pi \epsilon \iota \theta(o)$ etc. came sometimes to denote an act in progress or going on, and that $\pi \epsilon-\pi o \iota \theta$-denoted or came to denote an act as finished (?) or as resulting in a certain state of affairs. How many other ideas conld be originally, or later on came to be, denoted by these and other forms (e.g. an inceptive act by a suffix -sk-) it would be very difficult to say.
A. Now these original or subsequently developed distinctions between ( $u$ ) an act simply regarded as a complete whole, (b) an act regarded in detail or as in progress, and (c) an act regarded as already finished (?) or as resulting in a state of affairs (to disregard for the present the other ideas of e.g. repeated or attempted action), might not originally exist at all in some constructions, or in course of time might come to disappear in some constructions: and on the other hand might become more and more marked in some constructions, as time went on, and so increase the gulf that lay between them. Having thms considered some of the different ideas abont acts, we may now consider such things the time of the action in relation to the time of the speaker or of some act which he mentions. As I said above, an act may be regarded, B. as
actually taking place, or as possible, or as a duty, or as a general truth, or as desirable, or as a concession, at a time previous to, or future to, or contemporaneous with, the time of speaking or of some act which the speaker mentions. So, by combining these ideas, we have the possibility of many combinations : and though at first it would seem as if any combination of one idea from (A) and one idea from (B) would be distinet from any other such combination, still as a matter of fact the ideas frequently overlap. Two instances will suffice to make this clear.

It often makes little or no difference whether we express a future act as certain to take place (aorist) or as certain to be going on (progressive), or as certain to be finished (perfect); and a present, past, or future act as not possible, or as not aur actual act (as an act, or going on, or finished).

It is conceivable that au act or acts in the present or past, when stated as certain, were expressed by the Indicative of the Progressive, Aoristic, or Perfect, ete. tense: these ideas may have been distinguished originally or else have come to be distinguished later on: other ideas (such as repeated or attempted action) muy have been expressed by distinct forms originally, or later on, or have been expressed e.g. by aoristic forms extended to denote such meanings by contrast and thanks to the context, etc. (v. Aorist and Imperfect, and Principle X.).

It is possible that the distinction here between the action regarded as an action, or as in progress, or as finished etc., would, in some one or more languages, either not exist at all, or scarcely exist, originally, or else disappear as time went on, in at least some constructions, whereas in some other language or languages, in at least some constructions, the ideas might come to be contrasted more and more as time went on.

As to the method of forming the Indicative, it was possibly that of adding terminations directly to the root, or to the root + a suffix (and here we may possibly elass the 'Ihematic vowel): to denote pust time an angment might have been prefixed, but perhaps was not absolutely essential to the idea of past time: it is not impossible that this idea was originally expressed
(a) by other 'sign-posts' also, e.g. particles meaning 'then,' 'formerly,' 'once,'
(b) by the context and tonc ete. [cp. Homeric forms], until the idea of past time came to be more or less associated, as it were by chance, with certain forms of the stem, certain suffixes, and certain terminations.

It is possible then that in some languages there were originally, or came to be, Indicative forms expressing an act or acts, in past, future or present, as in progress, or simply as acts, or as completed (?) and resulting in a certain state of affairs, etc.

Similar possibilities apply to the Subjenctive or Future ${ }^{1}$ (whichever we like to call it) in one or more languages, whether it was originally altogether distinct from the Indicative, or differed from it by having an additional thematic vowel (or an Indeterminate vowel, (?), which $\rightarrow$ Latin a, but in (ireek followed the character of the Thematic vowel). (v. Appendix III.)

And it is possible that this Subjunctive or Future originally (?), or later on, had certain forms expressing a duty or a thing commanded, in some constructions where there was a distinction between such ideas and mere futurity. For the possibility of the Latin forms legam, legas, legat, etc., leges, leget, ctc., legerim and legero, legeris, legerit, etc., and legerem, legeres, legeret, etc., being Subjunctive in form v. Appendix III. We may also add the 'pluperfect' anauissem, dixissem, fuissem, -es, -et, etc., possibly modelled on the sigmatic aorist and perfect, or on only one of these tenses sometimes, in the Indicative (e.g. fuesem (?), cp. $\dot{\omega} \lambda \epsilon \sigma \mathrm{m} \rightarrow \ddot{\omega} \lambda \epsilon \sigma \sigma a$ ) and the (e)sem of the 'Imperfect' Subjunctive, possibly really aorist Subjunctive (e.g. regesem $\rightarrow$ regerem, es-sem).

Thirdly it is conceivable that the Optutive was (?) originally distinct from the Subjunctive in meaning, and expressed c.g. possibility, or was not distinct from the Subjunctive in meaning ${ }^{2}$, but was merely a bye-form expressing perhaps futurity, duty,

[^27]possibility, etc., and that, in some one or more languages and constructions, it was sometimes differentiated to express the simple occurrence of an act, or its progress, or its being finished, etc., as a possibility, and that in some one or more languages the same mood or one of its varieties may have originally or later on expressed the same ideas as desirable or as a concession. It is possible that the original or later developed identities of meaning of the Suljunctive and Optative may have resulted either in
(a) the partial or total disappearance of one form : or
(b) the amalgamation or contamination of the two forms:
whereas on the other hand the original or later developed ${ }^{1}$ differences of meaning of the Subjunctive and Optative may have widened the gulf between the two moods, whether this gulf was again bridged over or nut.

The characteristic vowel of the Optative was i or $\overline{\mathrm{i}}$ : one question is, whether the $\bar{e}$ which we find combined with i in siēs, $\dot{\epsilon} \sigma i \eta s \rightarrow \epsilon \ddot{\eta} \eta \mathrm{~s}$, syàs, is an integral part of the Optative, or whether it is the Subjunctive $\bar{e}^{\nu}$ (cp. legēs, $\lambda \epsilon \in \gamma \eta \tau \epsilon$ ): in this case this Optative might originally or later on have denoted a future possibility (?) ; or was the e that vowel which appears in the aorist, e.g. $\grave{\epsilon} \mu \dot{c} \nu \eta \nu$ ? In this case this Optative might have denoted futurity ete., leaving the time at which the act was future to be inferred from the context, etc. As to the $o+\iota$ of Greek, is the o an integral part of the optative, or is it the Thematic (or Indeterminate (?)) vowel, perhaps generalised, and extended


(c) Every meaning of the Optative can be easily derived from that of 'futurity' (in its various shades of meaning).
(d) In Sanskrit the Future Indicative (bhavisymini) is apparently a primary Optative in form, and the unfulfilled condition in past time (ep. Homeric Optatives) is future in form. [As to (roodwin's hobby, that the 'Optative represents a Subjunctive in the changed relation in which it stands when the main verb becomes past instead of present,' it fails miserably in the face of the
 Doric futures with bhavisymi?
${ }^{1}$ Felt more acutely by the sulte-minded Greeks.
${ }^{2}$ Whether this e he considered as original, or as due to levelling, in legémus beside $\lambda e ́ \gamma \omega \mu e \nu$.
levellings of $\epsilon \iota$ to ot would distinguish these forms from the Indicative $\phi \hat{\rho} \rho \epsilon \iota \varsigma, \phi \in ́ \rho \epsilon \iota:$ in this case was the Thematic (?) vowel the vowel of the Indicative (ср. ф'́ $\rho о \mu \epsilon \nu$ ), denoting merely a (?) possibility as actual, and leaving the time to be inferred from the context, or expressed by particles, etc., or was it the vowel of the Subjunctive (cp. édouat), denoting a future possibility? These are some of the suggestions as to Greek forms.

As to Latin, the methods of formation are very obscure, and any treatment must be very tentative and incomplete. If we suppose a more or less close comexion between the Greek and Latin methods, which of the two methods shown above, viz. ié (i in the plural), and oi (or ei (?)), predominated either originally or by analogical extension, and which method did not predominate, and how many amalgamations or contaminations of the two forms were there?

1.     - $\mathrm{i} \mathrm{e},-\mathrm{i}-$
siém
siēs
siēt
sīmus
sitis
sint, or si $[i]]_{0} t \rightarrow$ sient.
Hence by levelling sim, sīs, sitt, sint (?).
So (?) velïm, velīs, velit, velïms, velitis, velint, and (?) amaucrim, viderim, etc. (such forms being sigmatic aorists only, or aorist and perfect sometimes).

Here possibly iim $\rightarrow \mathrm{im}$, it $\rightarrow$ it, int $\rightarrow$ int may have levelled iss, īmis, ītis to ǐs, inmus, ĭtis.
2. oi, or ei (?).
$\left.{ }_{0}^{0}\right\}$ i $-m$
-s
-t
-mos
-te ( +s from 2nd person singular and 1st person plural)
-nt.

Here we have a series of queries: did Latin generalise o as Greek may have done, or did it generalise e, or use the Indeterminative vowel (a?cp. datos $\rightarrow$ datus, סoтós)? And then what would maccented ei, oi, or ai have become in Latin before letters like $\mathrm{m}, \mathrm{s}, \mathrm{t}$ ? Our evidence is singularly inadequate here -we have is in the plural of the $\bar{a}$ - and $o$ - stems: but in the ostems does ì come from Locative oi +s or ei +s , or Dative $0+\mathrm{ai}+\mathrm{s} \rightarrow \overline{\text { onis }} \rightarrow$ ois $\rightarrow \overline{\text { iss }}$, or is it the Locative singular $\overline{\mathrm{i}}+$ plural s (whereas oi +s might have become ēs), and in the $\overline{\mathrm{a}}-$ stems, is it from Locative $\bar{a}+\mathrm{i}+\mathrm{s} \rightarrow$ ais $\rightarrow$ is, or Dative $\bar{a}+a i+s \rightarrow \bar{a} i s \rightarrow$ ais $\leftarrow \bar{i}$, or is it transferred from the 0 stems (e.g. dulcibus feminine $=$ dulcibus masculine: hence a new form bonis feminine beside bonis masculine), whereas otherwise $\bar{a}+\mathrm{ai}+\mathrm{s}$ or $\overline{\mathrm{a}}+\mathrm{i}+\mathrm{s}$ might have $\rightarrow$ aes, or $\overline{\mathrm{e}}$, or $\overline{\mathrm{a}}$ ?

I can only suggest the mere possibility of some of these forms prodncing e.g. é before certain letters, and i before certain other letters: then one or the other vowei might have been generalised, and we should have as Optatives:

1. legēs, legēt, legēmus, legētis, legēnt:
[(?) root aorist optative : the so-called Future Indicative.]
2. legesēs $\rightarrow$ legerēs, legesēt $\rightarrow$ legerět, legesēmus, legesētis, legesēnt, cp. essēs :
[Sigmatic aorist optative: the so-called Imperfect Subjunctive.]
3. Amauessēm $\rightarrow$ amauissem, ēs, ēt $\rightarrow$ et, ēmus, ētīs, ēnt $\rightarrow$ ent: cp. fuissem, dixissem, vidissem:
[Either perfect, or perfect + sigmatic aorist, with an additional aorist s-so-called Pluperfect Subjunctive.]
4. amanesim $\rightarrow$ amauerim, is, it $\rightarrow$ ǐt, imms, îtis, int $\rightarrow$ int: cp. fuerim, viderim, dixerim: hence possibly the 1 of im, it, int was extendel, so that ìs, îmus, îtis $\rightarrow$ ǐs, inmus, ǐtis :
[Either perfect, or perfect + sigmatic aorist, with an additional aorist s-sio-called Perfect Snbjunctive.]
5. Can we possibly class here $\operatorname{sim}$, sis, sit, etc. velim, velis, velit, etc.?

As to the forms of the Latin Subjunctive or Future, therefore, with the exception of the forms in -bo -bis -bit, etc. (are
these Subjunctives of (?) stem bhu (i)?), and those in ām, ās, āt, etc. (which may be Subjunctives also), we may possibly refer every Classical form to
(a) Subjunctive only: or
(b) Optative only:
(c) sometimes one, sometimes the other: or
(d) sometimes a contamination of the forms of Subjunctive and Optative.

We may sum up a few of the possibilities, then, for Greek and Latin, with regard to the act regarded as a complete whole (Aoristic), or as in progress (Progressive) or as finished (?) and resulting in a certain state of affairs (Perfect), in present, past, or futmre time (the latter including also, to some extent, the idea of command, (luty, etc.), or (rarely) as possibilities (including sometimes the idea of wish):
(a) In 'Present' time (as in Future time) in Greek and Latin the Aoristic and Progressive are rarely distinct in form ${ }^{1}$ : i.e. in meaning distinctions may have existed (originally (?) or) later on, and have partially disappeared and have partially led to still further distinctions-but such distinctions are not, to any appreciable extent, expressed by distinctions of form. The 'Perfect' is very often distinguishable from these two ideas in form or meaning, but more often is, originally or by later development, iudistinguishable from the Past Aorist (ep. the amalgamation of the Latin Present Perfect, and Past Aorist, and some uses of the Greek Classical Perfect, and the Hellenistic Perfect).
(b) In Past time in Greek and Latin (the Latin form in -bām is, perhaps incorrectly, called an Imperfect: it may have been originally Aoristic: cp. the somewhat similar Sanskrit Aorist or Perfect tokayāmāsa 'he thought,' and, later on, mainly owing to differentiation with the Aorist, have served to express e.g. the Progressive where it was distinct from the Aoristic), the Progressive and Aoristic seem far more distinct: they may or (more probably) may not have been so distinet originally, but very
likely the gulf between them widened and further distinctions arose by contrast (v. Principle X. and the Aorist and Imperfect). Sometimes however they cannot be distinguished without we accept those excessively fine distinctions which delight the grammarian and confound the school-boy: this identity of meaning may have been original, or may lave arisen sometimes in negative sentences etc. As has been already said in (a), the Present Perfect is not (originally or later on) altogether distinct from the Past Aorist in Latin especially, and to some extent in Greek. And again, in both Greek and Latin we have many instances where the Past Perfect ${ }^{1}$ (or Past Perfect + Past Aorist?) is not distinct from the Past Aorist (cp. postyuam venit or vencrat: and with é $\pi \epsilon i$ sometimes in Greek).
(c) In Future time in Greek and Latin (including the Latin form in -bo, -bis, -bit), the Progressive and Aoristic are rarely distinct in form: i.e. in meaning distinctions may have existed originally or later on, and have partially disappeared and have partially led to still further distinctions, but such distinctions are not, to any appreciable extent, expressed by distinctions of form. Again, these ideas are not always distinguished from the Perfect, or Aorist + Present Perfect (cp. si venerit, dixerit, and si veniet, licet, in so far as these forms are Future or Subjunctive: also comp. $\pi \epsilon \pi \rho a ́ \xi \epsilon \tau a \iota$ and $\pi \rho \dot{́} \xi \in \tau a \iota$ or $\pi \rho a \chi \theta \eta \dot{\eta} \sigma \in \tau a \iota)$.
(d) As to Command, Duty, or Potentiality in Greek in so far as they were distinct from Futurity the Progressive and
 distinct in meaning as the senseless hair-splitting of some grammarians would maintain: in Latin it is a question how far the forms which may be Optatives (e.g. sis, esses) are Progressive, and how far they are Aoristic, in their present meaning.

[^28]Personally, I think that the almost invariable translation of maneres by 'you should have been remaining' is not warranted by the form, and certainly not required by the meaning (N.B. it is also clumsy). As to the Perfect in Greek, it may to a great extent be distinguished from the Progressive and Aoristic. In Latin the Aoristic may sometimes have been purely Aoristic in meaning and sometimes have hovered between the Progressive and the Present Perfect (cp. tantus est timor omnium nt nemo adsit, and tantus fuit timor omnium ut nemo adfuerit or adesset).

These are only a very few of the possibilities; a full disenssion of all possibilities would fill a volume.

I hope I may be excused for having so often repeated myself: it seemed so absolutely essential to insist on
(a) the inadequacy of our Phonetic Data, and the enormous influence of Analogy, and the possibility of some of the results which apparently it might easily have produced:
(b) the difficulty of the problem as to how far Indicative, Subjunctive, and Optative had origiually distinct meanings, and (to some extent) distinct forms, and as to how far such ideas about an act as being simply an act, or as in progress, or as (?) finished, were originally distinct, and were denoted by distinct forms.

I may at some future time venture on the similar problems about the act repeated, or habitual, or attempted, etc., or regarded as a general truth: I have not considered them here, but have touched upon them under the Aorist and Imperfect, to which I refer for a brief suggestion of a few possibilities.

In conclusion I may suggest (cp. Chapter II.) the following possibilities:
(A) The Indicative once connceted 'a person' with 'an action,' and might have meant ( $a$ ) 'he is now doing, he always does do, he did do,' (b) 'he will do, he is to do, etc.'-the meaning varied according to the tone and context, etc.
(B) The Subjunctive and Optutive denoted (b) 'he will do,' 'Ire is to do,' etc. and to a great extent superseled the IndicaM. T.
tive in denoting (b): but the Subjunetive may have once been only a form of the Indicative set apart to denote (b) (by differentiation). Later on certain Subjunctive or Optative forms were often set apart to denote 'futurity,' others to denote ' command, wish, ete.'
(C) The Imperative-chiefly an exclamation giving a command-was used beside the Subjunctive and Optative of command, especially in Positive Commands.

To return to the Indicutive, it was thus left to clearly denote (u) 'he is now doing it,' 'he always does do it,' 'he did it,' etc. Naturally 'he did it' came to be confined, to a great extent, to different forms from 'he is now doing it' or 'he always does it.'

As to the Tenses, the tense denoting an act might have occasionally, especially in past time, had two shades of meaning, e.g. 'he did it' ('Aorist' of Complete whole) and 'he was engaged in doing it' ('Progressive'): these ideas might have sometimes come to be denoted, (in some cases where they were distinguished) the Aorist by one set of forms (e.g. the weak root, or the root +s , etc.), the Progressive by another set of forms (e.g. the strong root or the root +a suffix). As to the 'Perfect,' if originally a branch of this tense, it may have sometimes been differentiated to express a lasting state rather than an act, sometimes to express a past act viewed in the light of its result: or it may have originally had (in some forms at least) the meaning of a state rather than an act.

Later on, further distinctions between the 'Aorist' and the branch of the same tense, not always distinct from the 'Aorist' either in form or meaning, and called the 'Progressive,' may have grown up partly by differentiation and contrast: or, on the other hand, distinctions already existing may have disappeared.

## Appendix $\mathbf{V}$.

## On the extent to which the New School are justified by the data which we possess in their present general method of stating and applying Phonetic Laws.

The Introduction and Appendix III. (e.g. v. the discussion of amēs) have given some liint as to the results here suggested. I have tried to everywhere avoid being dogmatic except where I dogmatically insist on dogmatism being out of place! and before I begin this discussion, it is absolutely necessary that I should clearly point out exactly how far I agree with the general methods of the New School, and how little I sympathise with the general methods of the Old School. The New School have done an inestimable service to Plilology, by (theoretically) insisting on accuracy and refusing to accept 'random shots,' and, though my own stock of Philological knowledge is painfully deficient, I have honestly done my best to accept no single suggestion and to offer no single suggestion, either in Morphology or Syutax, which has not a possible justification in a parallel development or Principle of development, wherever such a parallel was within my knowledge: and even here I lave usually insisted on the suggestion being a possibility or probability at the most: where it has seemed to me that our data (or the small proportion of our data which I have mastered) justify dogmatism (as in the statement that probably, in the clause preceding the $\pi \rho i \nu$-clause, an expression of a $\pi \rho i \nu$, $\pi \omega$, $\pi \rho o ́ \tau \epsilon \rho o \nu$ etc. was usually essential to the meaning, originully), I have nearly been dogmatic: but where it has seemed to me that our data do not justify any dogmatic statement, whether in Morphology or Syntax, I have considered
it far more accurate, in every sense of the word, neither to certainly deny, nor yet to certainly affirm. But I have (miserably inadequately, I know) tried to do what the New School has to a great extent egregionsly failed to do, to distinguish between what is accurate, and what is definite. In my opinion, the Phonetic Laws of the New School are as a rule as definite as one could wish, the table of Nouns and their Cases in Brugmann's latest volume seems definite to me (I have not read this volume of his work, and so I apologise for the mistake in case I am wrong), the table of the Latin 'Ablative' in Allen and Greenough (v. Appendix I.) is definite, and the statements of Monro on the Greek 'Dative' (v. id.) are exceedingly definite-few things could be more so: but none of these things do I consider as certainties, neither do I think that anyone, with the whole mass of possible extant data at his control, could prove the greater part of them to be certainties. Some of them may be certainties-this I do not deny-what I do deny is the present possibility of proving them to be certainties and the consequent inalvisability of stating them, and using them, as certainties.

Secondly, in refusing to give the origins of Syntactical constructions until a strict Phonetic basis has been established as the sole basis on which to work, I am entirely at one with the New School. Whatever objections one may make to their definiteness where it is out of place, one can never sufficiently thank them for their grand work here, without which we might still have been blindly working away on the assumption that we are to start with meanings and name forms according to those meanings (e.g. call mensae and dominī Genitives), rather than start with the forms and do our best to find out their original meanings by conjecturing from what original meaning every present meaning may be best derived either directly or in accordance with some Principles of Development in language. This I have tried to do: to collect a group of instances, to classify them, to see the meaning which might underlie the majority of them, to try if the instances in which this meaning is not apparent might go back ultimately to the original meaning by some recogmised process
of development-has been my ideal : how far I have fallen short of it, and have often miserably failed, and have suggested possibilities where even that suggestion may really be going too far, and how often I have omitted valuable data through ignorance or have neglected them through forgetfulness, I am convinced that no one could feel more keenly than I do (v. Appendix III. for some of the difficulties which I have fully realised).

A word as to the Old School: I think (take them as a whole) they did not err on the side of being dogmatic, in one respect at any rate: for they always allowed enormous scope for the suggestion of possibilities, even of the most contradictory nature, and, as one or more members of the Old School usually accepted that suggestion which seemed to him most probable, the mere fact of the Old School being able to dogmatically assert either that black was originally black, or that black was originally white or green, often excluded dogmatism. Their fault lay in accepting syntactical suggestions (even the wildest) as all almost equally probable, whether or not they were backed up by Phonetics, the only real basis for a Syntactical suggestion, or by some Principle of Development in language etc. And their second fault lay in accepting in the same way Etymological and Morphological suggestions (even the wildest) as having an equal claim to be right, if they had a merely apparent foundation in some general similarity of form, provided that the meaning would 'do well enough:' they began with the meaning and treated the form as a secondary matter, to be scarcely considered until a meaning had been found. Thirdly, they probed within the Indo-European period, where so much is really impenetrable darkness, and traced things back to beginnings without sufficient grounds: some of the results may be right, but few are demonstrably right in the present state of our evidence, and some are demonstrably wrong (e.g. the explanation of the $\theta \eta$ of * ${ }^{*} \tau \tau i \phi \theta \eta \nu$ as commected with $\tau i \theta \eta \mu \nu$, whereas it originated in the :nd person, *'̇tvor- $\theta \eta$ s, Sanskrit -thais, beside the 1st person ${ }^{*}$ ėtú $\pi \eta \nu$ ). Lastly, they did not make sufficient allowance for the fact that language expressed thought, and that changes of sound had other ruisons d'être besides the fact that they were easier to pronounce.

After thus deprecating any attempt that may be made to identify my methods with the methods of the Old School, I proceed to the subject of Phonetic Laws. The New School have formulated some 'Phonetic Laws' which are invaluable, and the debt of Philology to those who have strictly insisted on Phonetic Law is immense. Strictly speaking there is no exception to a Phonetic Law, if it be correctly formulated, and if it be clearly understood to apply, properly speaking, to words which occur under the same conditions: the caprice of a pedantic tyrant, or the more extensive use of a word by the lower orders than by the higher orders, or by people of one district than by people of another district, are different conditions. The letter which follows a rowel, the position of the vowel, whether initial, medial, or final, the accent on the vowel, and the groups of words which are associated in meaning or function with the word in which the vowel occurs, constitute different conditions (for others v. Introduction). We must remember that language has been made by millions and millions of men, with modes of thought, organs of speech, associations ete. almost absolutely different from ours (and to me it seems to some extent true that often, the more learned and cultivated a man becomes, the more likely he is to alienate his ideas from the ideas of these millions, and the less likely he is to see things as they saw them). I therefore suggest that, even if the New School have been working in the right direction, there is more than one unanswerable objection to their practice (not to their theory), which I will first state and then illustrate by a very curious possibility (with regard to the Dative in (ireek), which would, if a reality, perhaps revolutionise almost everything which Comparative Philology has stated about the history of this Dative. (I am alluding to the simple Dative, exclusive of Locative and Instrumental.)

The following case is purely imaginary: the method here used is the 'analytic,' for the inaccuracy of which see III. above. A certain termination is conjectured to be 'Indo-European,' because it seems to survive as a heritage in every IndoEuropean language, if we allow for its form being modified by Phonetic change: let us suppose that in 'Greek' it was added
to 30 verbal stems, including some 'modified' and some 'unmodified' stems, at different periors of the time when Greek was still a dialect of Indo-European : let us suppose that these 30 stems and terminations, i.e. the 30 words, lived through the (?) thousands of years of the more or less iudividual development of Greek, and that during that time some were subject to seven hundred conditions, and some to three hundred, and so on (v. Introduction and some of the conditions mentioned above): of which a certain proportion were common to all, a certain proportion common to twenty, a certain proportion to five, and a certain proportion peculiar to individual words. Let us suppose that between twenty of them there was such a similarity of condition as to resist the dissimilarity of condition, and to preserve (or analogically re-create) identity in the terminations of these twenty words: let us suppose that five others have become differentiated in form from the twenty, but owing to conditions of which the most important are so natural as to be obvious to us of the 19th century, can be comecter with the twenty: let us now suppose that with the last five the different conditions were strong enough to resist the similar conditions, that e.g. sentence-accent and preponderating frequency of use among people of a certain class or dialect, and the preservation of an archaism as a household word, and some phonetic change (which we know nothing about to-day), e.g. the union of a certain final letter of the stem with the initial letter of the termination, etc. have all conspired to change the five words to forms very different from those of the other twenty-five and from those of each other: and let us suppose that perhaps one form may be identical with a form with which it had no historical Phonetic connexion: let us assume that we know this for certain (just as in some stories we hear of men travelling back in a flight of thought over the secrets of the past centuries), and let us, in the light of this certainty, look upon the dogmatic results of the New School: we may suppose the following:
(a) The 20 are put together in one class: in it final $x \rightarrow x_{2}$ : hence a phonetic law is passed that final $x \rightarrow x_{2}$ always. This is inaccurate, because all the conditions of these 20 words
have not been the same. There has been a graduated scale, and perhaps the first two words have had 80 conditions out of every 100 in common, and the first and the third words 75 per cent. in common, and the first and last words only 50 per cent. in common: and the last word was only attracted to the other 19 by a magnet a millionth part more powerful, and was on the verge of being phonetically different from the other 19. This absolute classification is also dangerous, because the 20 words form a large class-so large a class that they are made a crucial test. It is as if one were to say that business-men usually wear black coats, and that therefore men with light coats are not to be classed as business-men, unless we can show the exact motive for wearing the light coat.
(b) The 5 are put as an exception to the law, or as a byelaw: strictly speaking there are no exceptions to any Phonetic Law: the phrase of the New School 'any apparent exceptions to our Phonetic Law are due to Analogy, etc.' is wrong: for these 'apparent exceptions' are due to 'our Phonetic Law' being wrongly stated and, therefore, to its not being a real Phonetic Law at all! In these 5 instances some of the differences of condition which have caused (a) and (b) to have different forms are apparent to us, and so it is assumed that we know all about these words.
(c) The 5 words which have a different form from (a) and (b) owing to differences of condition no longer perceptible to the New School, now remain : one is put under a Phonetic Law under whose influence it really never fell: e.g. $x \rightarrow x_{s}$ here, but $x_{3}$ was classed as coming from $X$, because $X$ also $\rightarrow x_{3}$, and the meanings of these two ultimately identical formations were similar: so this instance goes to strengthen the justification of a Phonetic law to which it dues not belong. It is as if one were to set down as a credit to the Jewish nationality the exploits of some one who happened to be like a Jew in appearance. Perhaps some one with a true instinct suggests that $x_{3}$ may go back to $x$, and was once identical in form with the $20+5$, but he confesses that he cannot see the conditions under the influence of which the forms of (c) diverged from those of
(a) and (b). The New School say that this suggestion is (not probably but) certainly wrong because it opposes 'a Phonetic Law:' whereas we know that the exact opposite is the truth, viz. that the statement of this 'Phonetic Law' is wrong because it is opposed by one or more instances.

I now suggest a possibility about the Greek 'Dative': it is possible (v. Appendix I.) that the only surviving forms of the Instrumental in Greek are fossilised adverbs, i.e. Instrumentals which are preserved more as fossils than as living and germinating cases. Instances miglit be $\mu \epsilon \tau \dot{a}, \pi \nu \kappa \nu a ́, \delta \iota \pi \lambda \hat{\eta}, \pi a ́ \nu \tau \eta$, etc. It is also not impossible (it is very far from probable) that the only surviving forms of the Dative in Greek are fossilised, i.e. Datives which are preserved more as fossils than as living and germinating cases. Instances might be the Infinitives in -al, $\chi a \mu a i$, , тapaí (beside Instrumental $\pi a \rho a ́$ ), and also $\lambda \hat{v} \sigma a \iota$.

Let us assume the possibility of
(1) -ai being a regular Indo-European termination of Datives, and -i of Locatives, and
(2) proportional aualogies,
(3) some levelling of various Ablant stem-variations (cp. $\phi \rho \in \sigma i$ beside $\phi \rho a \sigma i)$,
(4) the extension of the Locative over every Datival meaning (v. Appendix I., Appendix II., and also under the Dative and Locative), and of the Dative over some Locatival meanings, and the preservation of two forms to express the same meaning becoming unnecessary.

We must admit the possibility (no more) of the 'Dative' in Greek being always phonetically Locative ; in the consonantdeclension especially (e.g. $\pi a \tau \rho-i$, with stem-levelling), and in the u-declension, and in the i- declension (e.g. $\pi o \lambda \epsilon i-i \rightarrow \pi o ́ \lambda \epsilon i$ $\rightarrow \pi \dot{o} \lambda \epsilon \iota$ ) and in the $\bar{a}-$ declension (e.g. $\left.\chi \omega \rho \bar{a}-\iota \rightarrow \chi^{\omega} \rho \bar{a}\right)$ the possibility is obvious; it is in the o-declension (e.g. 入ó $\gamma \omega$ ) that it is not obvious-but here we have as strong an array of proportional analugies as one could wish for: we may see the natural phonetic development in oíко-七, оікке-t, but, side by side with this, we sce a more or less close correspondence
between various forms of the $o$－and $\bar{a}$－deelensions（in some stage of development）to be possible：

## Singular

Ablative：$-\omega \delta \rightarrow \omega$ ，$\omega$ s（before dentals）cp． $\bar{\alpha} \hat{\delta} \rightarrow \bar{a}, \eta, \bar{a} s, \eta s$ ，（before dentals）
Genitive ：（？）－$\omega \mathrm{s}$ cp． $\bar{\alpha}, \eta s$
Dative：－$\psi \quad$ ср． $\bar{\alpha},-\eta$
Instrumental：－$\omega \quad$ cp． $\bar{\alpha},-\eta$
Plural
Nominative：（？）－ws－ous－ou cp．（？）－ $\bar{\alpha} s,-\eta s-a s$
Accusative ：- ovs $\rightarrow$ ous $\quad$ cp．$-\bar{u} \nu s \rightarrow \bar{a} s$
Genitive ：－$\omega \nu$
Dative：$-\omega / s \rightarrow 0 / s$
Locative：－ous
cp．（？）$-\hat{\omega} \nu$
cp．$-\bar{\alpha}$ ss $\rightarrow$ als
cp．－als

Might not a Locative formation $-\omega$ have been possibly formed in correspondence with $-a-\eta$ by proportional analogies （e．g．$\lambda o ́ \gamma \omega$ Locative ：$\chi \omega \dot{\omega} \rho \bar{a}$ Locative $=\lambda o ́ \gamma o \iota \varsigma$ Locative ：$\chi \omega$＇́paıs Locative），at a time when the Dative $\lambda_{\text {óro }}$ had already been almost wholly superseded by the Locative 入óroı？I would not maintain the probability for one moment：I only suggest the possibility，and the consequent possilility of the invariable translation of every Greek＇Dative＇by＂so－and－so，literally＇to＇ or＇for＇＂being dispensed with in some Private sehools and elsewhere：ep．Momo（p．135）＂$\tau$ oíol＂＂́申єí入єтo＇he took away for（i．e．from）them＇．＂

If my arguments as to Phonetic Laws hold good，then it will not be a difficult change in Philology to use the words ＇possible＇and＇probable＇instead of the word＇certain，＇in giving the pre－historic developments of words and constructions： and，within due limits，to use the same words in condemning sug－ gestions．And it may be that this reservation will remind some people＇that man＇s truest wisdom is the eonfession of ignorance，＇ where ignorance（in one of its degrees）must exist so long as man is man．The change would be a radical one（so far as the practice，not perhaps the preaching of the New School is concerned），and one which on the whole everyone，who ventures on the ground of pre－historie developments，would have to adopt．

If，on the other hand，it should be proved that we have sufficient data for stating and applying all the Phonetic Laws
as absolutely as they have hitherto been stated or applied by the New School, and for absolutely accepting or condemming theories by them, then no one will be happier than myself at being allowed to be definite. And if, when I gaze upon ames, a hazy speculation should occasionally thrust itself unbidden into my mind, as to what would have been the ultimate form
 eis amăi-ois amain-ēs amcti-es am-ēs and many more forms, created at various times and with accents in diverse places, I shall bless the New School for telling me that our data assure us that at least twenty-five forms could not possibly have arisen by analogy or otherwise, or else, if they had arisen, could not possibly have become amēs by 'Phonetic Law.'

To sum up, then, a single letter or sound cannot occur under exactly the same conditions in any two words. No one who looks at the various conditions mentioned in the Introduction can possibly deny this: no member of the New School would deny it if for five minutes he quietly thought about the problem. Therefore, in classing together any two words as occurring under exactly the same conditions the New School have been definite but undeniably inaccurate.

My view is that the words which they have grouped together have (as a rule) probably or possibly occurred under similarities of condition strong enough to resist the dissimilarities of condition (v. p. cxix. above), but that in the present state of our evidence it is often impossible to say whether a given word has or has not occurred under so many conditions similar to those of another word as to resist the numerous dissimilar conditions.

## adDITIONAL NOTES.

The Additional Notes treat of the following points
(a) Agreement of Adjectives (To 1, 15)
(b) The 'Present' Indicative (To p. 19)
(c) The Future Infinitive and Participle (To p. 20)
(d) The Greek Aorist of 'the act of a moment ago' (so-called) (To p. 42)
(e) The expression of 'cause' 'hindrance ' and 'conditions' by 'Temporal 'sentences, the Locative case, and Participles (To p. 58)
(f) Finite verbs = verb 'be' + a noun of agency (p. 61)
(g) Past Purposes in Greek (To p. 61)
(h) Optative in Unfulfilled Conditions in Homer (To p. 61)
(i) English Unfulfilled wishes (To p. 61)
(j) Past Tenses in Unfulfilled Present Conditions (To p. 61)
(k) 'Different forms have not always different meanings' illustrated (To p. 70)
(l) The Future and Subjunctive (To p. Ixxxy)
(m) The Subjunctive and Optative (To p. cvii)
(a) P. 15, at the end of the parge, add " Adjectives may have come to 'agree' with Substantives in the following ways, which are roughly and inaccurately sketched here--
(i) Sometimes ager uber 'a field that is fertility,' nomen dulce övoua ทंठú 'a name that is sweetness' (i.e. one Substantive in Apposition to another), and Caesaris ager uber (est) 'Caesar's field is fertility,' Caesaris nomen dulce (est) Kaívapos ővoua ท̛ $\delta \dot{\prime}$ ( $\epsilon \sigma \tau \iota$ ) 'Caesar's name is sweetness' (i.e. one Substantive as Predicate to
another), might $\rightarrow$ 'a fertile field' 'a sweet name,' 'Caesar's field is fertile' 'Chesar's name is sweet,' (i.e. an Adjectival qualifying a Substantive) : hence by Assimilation or Proportional Analogy the tendency would be to say agrom uberem not uber, puerum dulcem not dulce, $\pi a \hat{\imath} \delta \alpha$ そj $\delta \dot{v} v$ not $\dot{\eta} \delta \dot{v}$, etc. etc. But this is probably not the sole origin of dulcis and jív́s, any more than the substantival sense of 'a deed' 'a doing,' in hoc est actum and agendum, тоиิтo $\pi \epsilon \pi \rho a \gamma \mu \epsilon$ 'vov or $\pi \rho a \kappa \tau \epsilon \in \nu \dot{\epsilon} \sigma \tau i$, 'this thing is a deed,' is the sole origin of actus $\pi \epsilon \pi \rho a \gamma \mu \epsilon ́ v o s$ and agendus $\pi \rho a \kappa \tau \notin \neq s$ meaning 'done 'and 'to be done': v. (ii) below.

Similarly, one origin of the 'agreement' of the 'Article' in
 $\tau \grave{\eta} v$ juvaíкa' he knows it, viz. the thing, him (?) viz. the man, her (?) viz. the woman' $\rightarrow$ 'he saw that thing, that man, that woman': hence
 viz. the voice,' would, by Proportional Analogy, give way to oije $\begin{gathered}\text { òv }\end{gathered}$ $\stackrel{3}{\omega} \mu \circ \nu, \tau \dot{\eta} v \phi \omega v \dot{\eta} \nu$.

But we do find instances like triste lupus stabulis etc. which are perfectly correct.
(ii) In 'Compounds' like $\omega \boldsymbol{\omega} \mu \boldsymbol{\gamma} \epsilon ́ \rho \omega v$ we see an Adjectival not 'agreeing' with the Substantive which it logically qualified: there might have been a tendency to give $\omega^{\prime} \mu-$ an inflexion like that of the word which it qualified, and to say $\omega \mu$ òs $\gamma^{\prime} \rho \omega \nu$ etc.
(iii) Some Genitives might, by Proportional Analogy, take the inflexions of Adjectives: perhaps the 'Genitive Plural' was in early times an Adjective qualifying an Accusative, e.g. nostrum librum 'our book,' and then when nostrum came to mean 'of us' it was natural to say nostrum libri rather than nostri libri. Conversely, supposing éfós and meus (cp. oós tuos etc.) were Genitives of the stems of 'I' and 'thou,' '̇pos $\hat{\omega} \mu o s$ mens humerns would be quite natural : hence, by Proportional Analogy, épòv ${ }_{\omega} \mu \circ{ }^{\circ}$ meum humerum, not $\epsilon$ é $\neq$ ós mens.

There might be very much in favour of identifying the Genitive es os $s$ with the es os $s$ of Adjectives, but dogmatism is out of place."
(b) P. 19 (The 'Present' Indicative), two lines from the bottom, after the word "survive" insert " Instances of (3) will be found in some 'Historic Presents' in Sanskrit, Greek (mangmented Aorist and 'Imperfect' forms in Momeric and Tragic
narrative may be instances), Latin, and English, and of (2) in Sanskrit and on pp. 61-63 (e.g. ${ }^{\prime \prime} \pi \epsilon \iota \mu$, dico, 'I go'), and of (2) as a question on the same pages (cp. ' what do I do next?' quo fugimus? $\mu \in \boldsymbol{\epsilon} \nu \boldsymbol{\nu} \in \boldsymbol{\nu}$;).

The exact shade of meaning e.g. 'you did, will do, are doing, are to do, etc.' (and the same ideas put as questions,) had to come at first from the tone, gesture, context, and particles like 'then,' 'some day,' ' to-day,' etc."
(c) P. 20 (The Infinitive and Participles): add "For the Future Infinitive in Latin v. pp. lxii and xc. : credo inimicos meos hoe dieturos superseded dicturum (Gellius) on the analogy of e.g. eredo te hoc dieturum, where dicturum, once an Aecusative of an abstract verbal noun (meaning 'being about to say') developed the meaning, and had the form, of an adjective agreeing with te. The adjective dieturus -a - mm was then formed from sueh constructions.

In Greek $\lambda \dot{v} \sigma \epsilon t v$ and $\lambda \dot{\sigma} \sigma \omega v$ were formed by Proportional Ana-
 Appendix III) :: $\lambda \tilde{\epsilon} \epsilon \iota \nu \hat{c} \omega v: \mathrm{x}$ y. $\mathrm{x}=\lambda \tilde{v} \sigma \epsilon \epsilon v, \mathrm{y}=\lambda \tilde{\sigma} \sigma \omega v$."
(d) P. 42, Principle $V . B$ : Contamination: add "The Greek Aorist which is said to express the act of a moment ago, (e.g. $\epsilon \pi \eta^{\prime} \imath^{\prime} \epsilon \alpha$ really $=$ ' I do at this present moment commend you,' and cp. à $\pi \epsilon ́ \pi \tau v \sigma \alpha$, '̇ $\theta a \dot{u} \mu a \sigma \alpha$, etc.) may be partly due to Contamination of e.g. 'You did or said something good or bad' + 'I now com-
 ïv $\notin \theta o v$. Dell,rück compares Sanskrit past Aorists which do sometimes express the act of a moment ago (e.g. 'the sun has just risen'), without proving that these Greek Aorists did express this idea (e.g. 'I did just now eommend ete. you')!"
(e) P. 58, Principle $X$ : Implication: add "The ideas of cause or 'hindrance' or condition which are sometimes expressed by quom $\epsilon \pi \epsilon i$ 'when' 'while,' and the Loeative ease in Sanskrit Greek Latin and English, were in early times merely implied (and sometimes strengthened by words like 'therefore' 'nevertheless' ete.) in the expression of 'time when': the development is seen in 'while the sm shines, at sun-shine,' $\rightarrow$ 'because (or if) the sun shines' in a context like 'it is lot,' and $\rightarrow$ 'although the sun shines' in a context like 'it is cold': cp. (to some extent) these ideas expressed by Participles."
(f) P. 6l, line 1: add " cp., on Inscriptions, ioudicaverit 'serve as iudex,' appareat 'be an apparitor,' etc."

## P 61, Principle XI. (Changes of Time) add

## (g) Past Purposes in Greek.

"When ${ }_{\alpha}^{\alpha} \pi \epsilon \iota \mu \iota i v \alpha$ í $\delta \omega$ (Homeric ${ }^{\prime} \delta o \iota \mu \iota$ also) 'I will go away that I may see' $\rightarrow$ the abstract 'I will go away in order to see, for the purpose of seeing' ( $=$ Infinitive of Purpose, like egit visere in Horace) the Greeks could say, by analogy, $\dot{\alpha} \pi \hat{\eta} \lambda \theta$ ov ${ }_{i v a}^{\prime \prime} i \delta \omega$ (hardly Homeric, perlaps,) or ioouc 'I went away in order to see, for the purpose of seeing' ( $=$ Infinitive of Purpose) $\rightarrow$ a past purpose 'I went away in order that I might see.' What moof have we of Goodwin's dogmatic assertion that iva "ò was 'more vivid' than itce iסooul?"
"(h) The Optative in Unfulfilled Past Conditions in Homer was, perhaps, similarly developed. каí $\imath$ v́ кєv áлóخоєто єí $\mu \grave{\eta}$ voท́ซєєє 'he will perish if she shall (English 'does' or 'should') not devise' $\rightarrow$ 'his perishing (abstract) would be the result if she should
 then would be the past result (he would have perished) if she had not devised.' The importance of ${ }_{\epsilon}^{\epsilon} \nu \theta u$ should be noticed: ${ }_{\epsilon}^{\epsilon} \nu \theta^{\prime}$ $\alpha^{\alpha} \pi{ }^{\prime} \lambda$ oıto is like the Sanskrit angmented Conditional used with the same meaning. For the idea of non-fultilment v. p. 60."
(i) "The Enylish idiom 'I wish he had come' might be partly due to 'I knew he had come' $\rightarrow$ 'I knew his past coming' (abstract), whence, by analogy, 'I wish his past coming' $\rightarrow$ ' I wish he had come."
(j) Past tenses in Unfulfilled Present Conditions: (cp. also p. 43).
"It is possible that such constructions do not exist in Homer and Plautus, but at least we can see the germs of them there. In Greek
 he (?) were doing or had been doing this now, he (?) would be or have been doing wrong') the development was perhaps partly: 'if he had been doing it he would have been doing wrong' (past) $\rightarrow$ 'his doing wrong (abstract) would be a consequence of his doiug this (abstract)' $\rightarrow$ 'his doing wrong now would be a consequence of his doing this now' $\rightarrow$ 'if' he had been doing this now he would have been doing wrong.' Observe the importance of the words 'now' ( $\nu \hat{v} v$, nunc, hodie, etc.). For the idea of non-fulfilment v. p. 60."
cexviii ADDITIONAL NOTES TO PP. 70, lxxxv, cvii.
(k) P. 70, Principle XIV: (Different forms have not always different meanings): after "regno?" (six lines from the bottom of the page) add "Can a difference he proved (not merely asserted) to always exist between the meanings of $\tau \grave{o} \pi o \iota \epsilon \hat{\imath}$ and $\tau \grave{o}$ moıท̂$\sigma \alpha$,



 structions with ö́rıs (in 'Gencral' Conditions), and (in the Apodosis

 and similar constructions with ö ơィs (in 'General' Conditions),
 $\tilde{\epsilon} \beta \eta$ and $\beta \epsilon \beta \eta \eta_{j} \kappa \iota($ Homeric), etc. etc.? Latin constructions parallel to some of these would also admit of the same query, e.g. can a difference always be proved to exist between si hoc faciat and faciet and fecerit in Protasis and erret and errabit and erraverit in Apodosis, and between cum vidit and vidisset?"
(1) P. lxxxv, line 9, after the words " $\stackrel{a}{\alpha} v$ or $\kappa \epsilon(v)$ ": add "and Latin constructions like legam and dixerit ('Future' and 'Subjunctive'), iam fuxo hic erit, etc."
(m) P. cvii, Footnote 2, 3 lines from the bottom of the page, after the word "identical": add "in many constructions: cp. dixerit a possible Suljunctive and a possible Op,tative."

## A. ENGLISH INDEX.

The following are the chief abbreviations:
$\rightarrow=$ developed into
Abl. =Ablative ('from,' etc.)
' Abl.' = Latin ' Ablative ' (i.e. roughly speaking, Ablative and Locative and Instrumental, etc.)
(ren. $=$ Genitive (Adjectival, etc.)
Gk. 'Gen.' = Greek 'Genitive' (i.e. roughly speaking, Genitive and Al)lative)
Instr. = Instrumental (' by ' ' with ' etc.)
Loc. = Locative (' in ' ' at ' ' on' etc.)
Dat. =Dative ('to ' 'for' 'etc.)
' Dat.' $=$ Greek ' Dative ' (i.e. roughly speaking, Dative and Locative and Instrumental)
Lat. 'Dat.'=Latin 'Dative' (i.e. sometimes Dative, but in the Plural Dative and 'Ablative.')
$\mathrm{P}=$ Preface.
$\mathrm{A}=$ Appendices.

ABLATIVE ('from'-case in early times)
forms: General Account A lxviiilxx
$10,12,13-14,26,31,32-35$; A iv-vii, xi, xiv-xvii, xviii, xxxy-xxxvi, xliii
o-stems...A xlv-xlvi, xlix-1
$\bar{a}$-stems...A lii, lv
i-stems ...A lvi, lx
u-stems...A lxi, lxiv
n - or consonant -stems...A lxivlxv, Ixvii
meanings: $v$. under the followingAbsolute, 'According to,' (for Adverbial v. Manner, for After v. Time), Agent,
Cause, Circumstance, (for Compass or Extent v. Specification, for Concerned Part v . Specifica. tion), Compared Thing,
(for Measure of Defect v . Measure, for Degree of Difference $\mathbf{v}$. Measure), Description, (for Direct Object v. Objcct, for Measure of Excess r. Measure, for Exchange
v. Price, for Extent v. Specification, for From v. Place, for Goal v. Place),
Indirect Object, Infinitive, Instrument,
Manner, Material, (for Means v. Instrument), Measure of Excess, etc., (or Members of a Class v. Partitive, for Motion from v . Place),
$=$ Nominative,
Direct Object, Object, (for Part Concerned v. Specification),
Partitive, Place at which, from which, to which, Price and Value, Prepositional, (for Purpose v. Object, for Quality v. Description, for Remoter Object v. Indirect Object, for Respect v. Specification, for Separation v. Place),

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Description, (for Direct Olject v . Object, for Measure of Excess v. Measure, for Exchange v. Price, for Extent v. Specifica. tion, for From v. Place,
Hindrance,
Infinitive, Instrument,
Judging Person,
Manner, Material, (for Means v. Instrument), Measure of Excess, etc., (for Members of a Class r . 'Partitive,' for Motion from v. Place),
$=$ Nominative,
Object (direct),
' Partitive,' (for Person Judging v. Judging), Price and value, Prepositional, Place at which, from which, to which,
Quality, (for Respect v. Specification, for Road by which $v$. Space through which),
Specification, (for Sphere v. Space and Time, for Stake v. Price, for Thing Compared v. Compared Thing),
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$=$ Imperative, $=$ Indicative, Indirect Object, Infinitive, Instrument,
Judging Person, for Means $v$. Instrument, for Motion to $v$. Place,
Object or Purpose, Object (direct), (for Person Benefited v. Benefited Person, for Person Judging v. Judging Person,
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$=$ Imperative, Indirect Object, Infinitive, Instrmment,
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Benetited l'erson,
Cause, Circumstance, Compared thing,
Defining substantive, Description, Excess (measure of) (v. measure), Instrument, Indirect Object Nanner
$=$ Nominative

Object or Purpose, Object (Direct)
Part concerned, (v. Specification)
Partitive, Place at which, from which, to which
Possessor, Prepositional, Plice and value, Purpose.
Source, Space through which, Specification
Time after which, at which, throughout which, way by which, within which.
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$=$ Nominative
Object or Purpose, Object (Direct)
Part Concermed, Partitive, Place at which, from which, to which, Possessor, I'repositional
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Absolute, Accompaniment, According to, 'Against,' Agent
Canse, Circumstance, Compared thing,
Description
Ethic
Indirect olject, Infinitive Instrument
Judging Person,
Manner, Material, (v. also Description), Measure of Excess etc.
$=$ Nominative to,
Object or Purpose, Object (direct)
Partitive, Prepositional, Price and value, Place at which, from which, to which
Source, Space through which, Specitication
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Absolute, Accompaniment, According to, Against, Agent
Benefited Person
Cause, Circumstance, Compared thing, Condition
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=Indicative, Indirect Object, Infinitive, Instrument
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Manner, Material (see also Description) Measure of Excess
$=$ Nominative
Object or Purpose, Object (Direct)
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## Uni


[^0]:    ${ }^{1}$ If this be the right reading．

[^1]:    ${ }^{1}$ It is possible, then, that the history of the Aorist and Perfect, and of the Subjunctive and Optative, was that Greek differentiated what Latin amalgamated.

[^2]:    ${ }^{1}$ Goodwin.

[^3]:    ${ }^{1}$ It is quite obvious that in $\grave{\epsilon} \dot{\alpha} \nu$ '̀ $\lambda \theta \eta \eta \dot{o} p \hat{q}$, 'whenever he eomes he sees,' the time of $\epsilon \lambda \theta \eta$ is not future (or rather is not merely future), and that, if $\begin{gathered}~ \\ \epsilon\end{gathered} \theta \eta$ was originally future in meaning, it has changel its meaning. This is a statement of the difficulty. The explanation obviously lies apart from this and, I think, in the development of $\dot{\epsilon} \dot{a} \nu \dot{\epsilon} \lambda \theta \eta$ (ö $\psi \in \tau a u$ ) from 'if he shonld come (he would see)' to 'granting his coming (he would see).' Onc frequently finds that what is given as an explanation is really nothing more than a statement of the difficulty.

[^4]:    ${ }^{1}$ Conway in the Cambridge I'hilologieal Society's Proceedings, Lent Term,

[^5]:    ${ }^{1}$ Just as the Optative in Indirect Statements in Greek seems to be derived
     cin, v. under the Subjunctive and Optative), so it is possible that the Indirect Command 'I order you about (Locative) or for (Dative) taking' $\rightarrow$ e.g. 'I order your taking'; and that 'I mention your taking' is an analogical extension from this: in other words imbeo te capere (eapī), кє $\lambda \epsilon \dot{\jmath} \omega \sigma \grave{\ell} \lambda \alpha \beta \epsilon i \bar{\nu}$ ( $\lambda \alpha \mu \beta a ́ \nu \epsilon \sigma \theta a \iota) \rightarrow$ e.g. 'I order your taking,' and hence, by analogical extension, we can say dico te capere (eapī), $\phi \eta \mu i \quad \sigma \epsilon \lambda \alpha \beta \epsilon \hat{\imath} \nu(\lambda \alpha \mu \beta \dot{\alpha} \nu \epsilon \sigma \theta a \iota$ ), meaning 'I mention your taking' (v. Principle X. 12). But it cannot be proved that iubeo te capere was an earlier construction in Latin than miror te capere.
    $\because$ Goodwin's remark that the Infinitive was first a Dative, and 'then later on allowed to take a Subject in the Accusative,' is remarkable.

[^6]:    1 In fact it can scarcely be denied that it is nsually the verb which repeats the notion already expressed by the noun.

[^7]:    ${ }^{1}$ N.B. a second oljection is that the application of the rute to common Genitives with aiбӨávorac, кратй, ete., and often in Sanskrit even with verbs of 'giving,' etc. (e.g. 'give (us) immortality' can be rendered by a (ienitive in Vedic) is absurd. Why should the Genitive with aiogavouat differ madically from that with aifoljcs? Momro also (p. 144) makes them differ radically (" in most 'Genitives' the action of the verb does not affect the person in a sufficiently direct and uncualified way ").

[^8]:    ${ }^{1}$ Mr Middleton in an Essay on Analogy in Syutax (which contains many usefinl instances) says that the Middle $\rightarrow$ the Passive was due to "Contamination of Function' no more ! !!

[^9]:    ${ }^{1}$ Much of this Appendix is a repetition and amplification of Chapter rr., and of the Cuses (Chapter iv.).

[^10]:    ${ }^{1}$ Perhaps the root-aorist ought also to be considered: for it might possibly become identical with the Perfect e.g. in the first person pluwal: v. Appendix IV.

[^11]:    ${ }^{1}$ o e es might conceivably prodnce - ois $\rightarrow$ eis $\rightarrow$ is: but -ris is the earliest Italic form I think.

[^12]:    ${ }^{1} \chi \alpha \mu a i$ is probably from $\chi \theta$ m-al, a Dative (of the stem $\chi \theta o \mu-\chi \theta \epsilon \mu-$ ) which has extended over a meaning once Locatival, just as perhaps the Dative
    
    $\because$ And v. end of Appendix $V$. for $-\omega$. $\quad *$ E.g. before an initial vowel.

[^13]:    ${ }^{1}$ As to the original Ablative form in this consonant-declension, v . the note at the end of this Appendix. In the $i$-deelension $-\mathbf{i}+$ ed might produce -id $\rightarrow i$ [ $c \mathrm{c}$. filie $\rightarrow$ fili], but in the consonant-declension itself are there any grounds for suggesting a unique ending -id, as Brugmann does, rather than the ending -ed -od -d (Ablaut variations) which seem possible everywhere else? On the other hand, where we do find -id (? id) in Inseriptions it may be easily due (for, even at this period of Latin, analogy had already accomplished the great feat of extending the Passive -r) to the analogy of the i-declension; e.g. (?) turrem (accusative), (?) turris (genitive), turrī ('dative'), turrī(d) ('ablative'), turribus may have produced for pedem, pedis, pedī, pedibus a fourth form pedi(d) (ablative), just as these, and other forms, oceasionally produced, by proportional analogies, genitive plurals in -ium (not -um) belonging to the consonant-declension. (N.B. We do not neecssarily, on this account, postulate an original ending -ium for the con-sonant-dechension.) Secondly, granting the possibility of early Ablatives ped-od, ped-ed (the strong form of the stem perhaps on the analogy of pél-em ete.), what would they have become by individual phonetic development? I think that this is one of those instances (binted at in the Introduction) where we have not sufficient grounds for postulating a hard and fast phonetic law: it must be remembered that quid and quod are monosyllables, and might have influenced aliquid, aliquod, quidquid, and even aliud etc., and that therefore peded and pedod cannot be proved to have existed under exactly the sume comditions as these words, and, if they were influenced by any analogy, it woukd probably have been the analogy of other Ablatives, like turrii(d), equī(d) etc., which lost final d by 'Plonetic Law'. I therefore suggest the possibility (no more than that) of pedod, peded, if they ever existed, becoming pedě by phonetic law: for
     dues indeed correspond to (é) $\lambda$ '́rou and not to $\lambda \in \gamma \in \sigma \iota($ active and 1 mimary) $\rightarrow \lambda \epsilon \gamma \epsilon \epsilon$ (also used as 2nd person middle and passive).

[^14]:    ${ }^{1}$ Sce Note at end of this Appendix.

[^15]:    ${ }^{1}$ Or could it he Loc. bhis + Instr. a-s ((?) $\left.\rightarrow n s\right)$ contaminated?

[^16]:    ${ }^{1}$ It is quite possible that dieturnm is not from this Locative dictn̄ + esom, but is from the pure stem dictu + esum $\rightarrow$ dietinrum. The normal compound was formed from the stem and not from a case-form (i.e. a stem + ease-ending). In this case, the pure stem + some part of the verb 'be' might easily acquire a future sense: ep. amā (pure stem) + bō (from (?) bhuiō, or bhū̄, almost=sum), and Sanskrit bodhita or bodhita (cp. $i \pi \pi \delta-\tau \alpha)+$ asmi $=$ ' $I$ shall know.'

[^17]:    ${ }^{1}$ It must be remembered that, if Genitives originally ended in es, os, or s , and Ablatives in ed, od, or d, then the instanees of Genitives used with Ablatival meanings in Sanskrit Grammars are grossly inadequate: for instances of Genitives should be taken from all 'Genitive' or 'Ablative' forms in -as, whereas they are only taken from the o-stems, as a rule, where the Genitive had the extra adjectival sulfix io, and so would not so often extend over the Ablative (Sanskrit ād) as in other declensions: i.e. the instances are taken from the very declension where we should expect ('enitives to have least of all extended over Ablatival meanings: it is, perhaps, exactly as if we were to take all our instances of the Greek 'Genitive' extending over Ablatival meanings from no Greek forms except those like $\delta \eta \mu \delta \sigma i o(s)$.

[^18]:    ${ }^{1}$ I hope I may be excused for using various forms of $\tau i \pi \tau \omega$ which do not exist (if only for the sake of Aukd Lang Syne, and because túnte has the luxury of two aorists!).

[^19]:    ${ }^{1}$ e.g. if we split up turrī (Dative of an i-stem) into turri-i, we may forget that the relation of e.g. turrì and turribus to turrium may have helped to produce plurium beside plurī (Dative of a consonant-stem) and pluribus (from plur- $\partial$-bus).

[^20]:    ${ }^{1}$ Cp., to some extent, one theory about the Genders.

[^21]:    ${ }^{1}$ As I have already said, above, for the sake of convenience the analytical method is employed, in spite of its inaccuracy: and non-existing forms of $\tau u \pi \tau \tau \omega$ are given (partly for convenience, partly for Auld Lang Sync).

[^22]:    ${ }^{1}$ One may here mention the attempt to connect the -b- with the b of baculum, ßáктроу, or of bito, in which case perhaps amābo would have originally meant 'I go to love,' almost amatum eo; cp. je vais dire: and an attempt I once thought feasible (but which Mr Monlton of the Leys School kindly told me could not possibly explain the -b- of the Celtic future) to find in amãbo, monebo the phonetic result of (?) amā-habo (aorist present to which habe(i)o was a parallel form perhaps; ep. Heteroclisis in l'lautus) $\rightarrow$ amābo (cp. nihil $\rightarrow$ nil etc.), mone-habo $\rightarrow$ mone hebo $\rightarrow$ monēbo (and so for the imperfect), meaning originally perhaps 'I have to love' $\rightarrow$ 'I shall love' (cp. j'aimer-ai, j'aimer-ais) : a partial parallel would be est mihi agendum 'I have a deed (to be done),' 'I have to act,' and habeo dicere.

[^23]:    ${ }^{1}(?) \rightarrow$ тú $\boldsymbol{T} \tau \epsilon$.

[^24]:    ${ }^{1}$ It is possible that the first person $\cdot \mathrm{im}$ was partly subjunctive, and due to levelling with is, it, imus (?), itis.

[^25]:    ${ }^{1} ? \rightarrow \tau \dot{\prime} \pi \eta$.

[^26]:    ${ }^{1}$ The analytieal methol is here employed, in spite of the fact that as a general rule perhaps words were not formed by adding snffixes and endings ete. to a stem, by a proeess of adding arms and legs to a stump, but were formed, largely by proportional analogy, on the model of already existing unitio.

[^27]:    1 The Sanskrit 'Future' denotes e.g. 'will,' 'futnrity,' 'promise,' 'threat,' 'desire,' the 'Subjunctive' and 'Optative' (very roughly speaking) 'will,' 'futurity,' 'promise,' 'threat,' 'desire,' or 'obligation,'

    * Argments in favour of the optative as well as the Subjunctive originally meaning 'Futurity;' are, e.g.
    (a) In Sanskrit and Latin the meanings of Subjunetive (or Future) and Optative forms we practically identical.
    (b) In Homer there are not many types of constructions of the Subjunctive where the Optative would not stand, and (to a less extent) vice versa.

[^28]:    ${ }^{1}$ There seems to be, in the Greek 'Pluperfect,' an augment + a Perfect stem + an aorist $\epsilon \sigma$ - the secondary endings: e.g.
    

[^29]:    -s Aorist A xi, xciv, civ-cv, cx-cxii
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